

# Apple-Works Forum

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Support for AppleWorks and ///EZ Pieces Users

## Controlling Where You Save

Dear NAUG,

My students run AppleWorks on Apple IIe computers equipped with a single 3.5-inch disk drive. However, the students often forget to change disks in the drive and end up saving their work on their AppleWorks Program Disk instead of on their data disk.

How can I get them to switch disks before saving their work?

Linda Harmon  
Victorville, California

*[Joe Connelly replies: You can force the students to switch disks by setting AppleWorks' default device to /DATA. Then use TimeOut FileMaster, Copy II+, or any other disk utility program to rename all the student data disks to /DATA. Finally, tell your students to assign the name /DATA to every disk they format. AppleWorks will then look for the disk named /DATA when it loads files onto the desktop or saves files on a disk.]*

Follow these steps to configure AppleWorks 3.0 to look for the /DATA disk:

1. Go to the Main Menu and choose #5 ("Other Activities").
2. With the Other Activities Menu on the screen, choose #6 ("Select standard settings for AppleWorks").
3. With the Standard Settings Menu on the screen, choose #5 ("Select standard location of data disk").
4. With the Standard Data Disk Menu on the screen, highlight the last choice ("ProDOS Directory") and press Apple-Return.
5. Type the name /DATA in response to the "Directory?" prompt and press the Return Key.

Finally, you should use your modified Program Disk to make new working copies of AppleWorks. Alternatively, you can copy the file SEG.ER from the AppleWorks Program Disk you just changed onto all your working copies of AppleWorks.]

## No Slot Clock Problems

Dear Cathleen,

I run AppleWorks 3.0 on my No Slot Clock-equipped Apple IIe. After years of use, my clock suddenly became unreliable and no longer reports the right time. Any idea why this might happen?

Barbara Singer Kelly  
Reston, Virginia

*[The No Slot Clock uses an internal lithium battery to keep track of the time. SMT, manufacturer of the clock, rates the battery life at ten years, and I suspect that the battery in your clock reached the end of its useful life.]*

The battery is not replaceable; you will need a new clock. You can get a No Slot Clock from many sources, but the best price I found is \$23 plus \$5 s/h from Alltech Electronics, 602 Garrison Street, Oceanside, California 92054; (619) 721-7733; Fax: (619) 721-2823.

Apple IIe owners should consider installing a No Slot Clock in their computer. Once installed, the clock automatically time-stamps every file you save on a disk and provides correct output when you use AppleWorks' Print Date and Print Time functions. The No Slot Clock also displays the time on the screen if you enhance your copy of AppleWorks with TimeOut UltraMacros, SuperPatch, or Companion Plus.]

## AppleWorks Forum

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### Problem with "Creeping" Labels

Dear Cathleen,

I recently received 5,000 customized labels I ordered for my business. Now I discover that my system suffers from "creeping labels syndrome"; the text prints progressively lower on each label until the printing creeps off the bottom of the label. I can print about eight labels before I must reposition the labels. I tried all different label settings in AppleWorks with no success. What is the secret to getting the printing to stay in place?

Karen Ann Drebes  
Detroit, Michigan

*[Ed: Karen, you're not doing anything wrong. The problem is with the labels you ordered. Each label is two inches high and separated by a 1/16-inch space from the next label. AppleWorks (and most other computer programs) measures the height of each label from the top of one label to the top of the next label. Thus, to AppleWorks, your labels are 2-1/16 (2.0625) inches high. AppleWorks lets you adjust label height to the nearest tenth of an inch, so you cannot "tell" AppleWorks the true height of your labels.*

*I think the easiest solution to your problem is to order new labels. Tell the printer you want 1-15/16-inch high tractor feed labels; that's a standard label size. Then use your existing labels in a typewriter or for some other application.*

*See the following articles published in the **AppleWorks Forum** for more information about printing on labels:*

*"Techniques to Improve Your Labels" (March 1988).*

*"How to Get Started with the Data Base Module - Part 4" (February 1990).*

*"Three Commands that Can Improve Your Labels" (November 1991).]*

### Member Needs a Disk Notcher

Dear Cathleen,

I want to notch my 5.25-inch disks and use both sides of each disk. Do you know where I can buy a disk notcher?

Dorothy Viets Schell  
Moscow, Idaho

*[Ed: Although many NAUG members save money and storage space by using both sides of their 5.25-inch disks, the practice of converting disks to "flippies" is controversial. According to disk manufacturers (who have a vested interest in selling you disks), flipping the disk causes it to turn in the opposite direction; that can loosen dust and dirt from the protective liner inside the disk sleeve.*

*Disk notchers were once a standard item at most computer stores, but with the increased popularity of 3.5-inch disks, they are now hard to find.*

*You can get a disk notcher for \$4.95 plus \$4 s/h from Educational Resources, 1550 Executive Drive, Elgin, Illinois 60123; (800) 624-2926; In Illinois: (708) 888-8300; Fax: (708) 888-8499.]*

### A Word Count Reminder

Dear Cathleen,

Thanks for describing how to use the AppleWorks spell checker to count the number of words in a document (**AppleWorks Forum**, December 1991, page 2). But you forgot to tell us that there must be a misspelled word or something that is not in the speller's repertoire to get a word count. Once you insert that word, the technique works like a charm.

William Pegues  
Charlotte, North Carolina

The **National AppleWorks Users Group (NAUG)** is an association that supports AppleWorks users. NAUG provides technical support and information about AppleWorks and enhancements to that program. Our primary means of communicating with members is through the monthly newsletter entitled the **AppleWorks Forum**.

### Use Macros to Customize AppleWorks

Dear NAUG,

I own a small family resort and use my Apple IIe to produce reservation confirmations, print the guests' bills, and maintain my mailing list.

I use an AppleWorks spreadsheet template to produce the confirmations and bills. I maintain the mailing list in a simple AppleWorks data base.

The guests' names and addresses appear in both files. Is there any way to automatically copy this information from the reservation confirmation into the data base?

Dave Kline  
Canadensis, Pennsylvania

*[Ed: This is one of many letters we receive from members asking if they can automate AppleWorks for a particular application.]*

*The best way to customize AppleWorks is to write macros that automatically perform the tasks required by your application. Many of these macros are not difficult to write, once you know the commands and syntax of the powerful UltraMacros programming language.*

*The best way to learn these skills is to do the lessons in Mark Munz's book, **The UltraMacros Primer** (\$17.95 plus \$3.50 s/h from NAUG). Alternatively, you can find a volunteer or hire a consultant who will write the macro for you. I suggest that you either post your request for help on the NAUG BBS or call the Members Helping Members volunteers listed in this issue of the **AppleWorks Forum**. However, writing and testing sophisticated macros take time, effort, and skill, so you cannot expect this to be volunteer work.*

*NAUG will publish a list of professional macro writers in a future issue of the **AppleWorks Forum**. Members who want their name to appear on that list should submit their name, address, telephone number(s), and hourly fee to: Macro Writers, NAUG, Box 87453, Canton, Michigan 48187.]*

### Special NAUG Offers

#### JEM Software

DB Pix is an AppleWorks 3.0 enhancement that lets you include graphics in your AppleWorks data base files. A complete description of DB Pix appears in last month's issue of the **AppleWorks Forum**.

DB Pix usually costs \$25. Until August 1, NAUG members can buy DB Pix directly from the developer for \$20 plus \$3 s/h. Colorado residents must add sales tax. International orders, add \$2. JEM accepts Visa and MasterCard. *[JEM Software, 7578 Lamar Court, Arvada, Colorado 80003. Orders and fax: (303) 422-4856.]*

#### Office Productivity Software

DiskTools is a set of TimeOut modules that add archiving, backup and restore, and ShrinkIt capabilities to AppleWorks. A comprehensive review of DiskTools appears on page 23 of this issue of the **AppleWorks Forum**.

DiskTools lists for \$49.95. Until September 1, NAUG members can buy DiskTools directly from the publisher for \$35 plus \$2.50 s/h. Include your check and your NAUG membership number with your order. Office Productivity Software maintains a "satisfaction guaranteed or your money back" policy for NAUG members. *[Office Productivity Software, Box 1042, Mahomet, Illinois 61853.]*

#### Resource Central

Resource Central now distributes Bag of Tricks 2, a popular disk recovery program that can recover data from damaged DOS 3.3 and ProDOS disks. (See the article that starts on the next page for a description of some of the ways to use this disk.)

Bag of Tricks 2 usually sells for \$29.95. Until September 1, NAUG members can buy the program directly from Resource Central for \$24.95 postpaid. Resource Central accepts MasterCard and Visa; include your NAUG membership number with your order. *[Resource Central, Box 11250, Overland Park, Kansas 66207; (913) 469-6502; Fax: (913) 469-6507.]*

# How to Recover Lost Data — Part 2

by James Hirsch

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*This is the second in a series of articles that describes how to recover data from damaged disks. Last month's article described how to recover files from disks with intact directories. This month, Mr. Hirsch outlines step-by-step procedures that can recover data from disks with damaged directories.*

---

If you are one of the few AppleWorks users who never lost access to one or more of your data files, you are lucky. NAUG receives dozens of letters each year from members who need help recovering their damaged files.

Last month, I described how to use AppleWorks and utility programs such as Copy II+ to recover some of your damaged data. Those techniques recover deleted or damaged files from otherwise intact disks. This month you will learn how to recover files from disks with damaged directories.

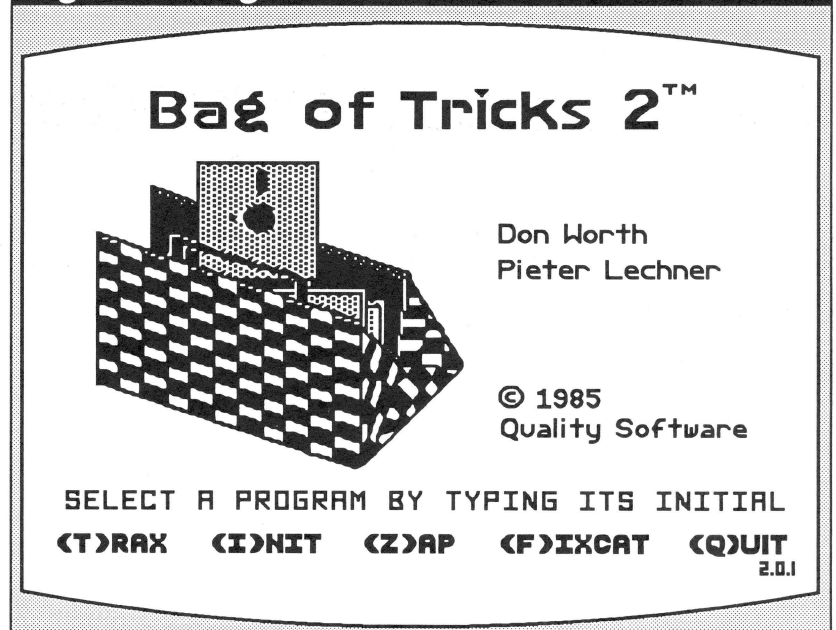
Specifically, I will describe how to use the "automatic" mode provided by two commercial programs to rebuild the disk directory and recover your data. All you need do is make menu selections and hope for the best. However, you should only use these procedures after you try the processes I described in last month's article.

## Damaged Disk Directories

First, some background:

Track zero of every ProDOS disk contains a "directory" that lists all the files on the disk. ProDOS uses the directory to keep track of the contents of the disk and to locate the files you want to read into AppleWorks. A damaged disk directory is a serious problem because it keeps AppleWorks from accessing some or all of your data stored on the disk.

**Figure 1: Bag of Tricks Main Menu**



If you have a damaged directory, AppleWorks displays the message "Getting errors trying to read directory at..." or your disk drive produces a ratcheting sound when AppleWorks tries to read the disk.

If you encounter these problems, remove the disk from the drive, spin the disk slightly in the sleeve, set it back into the disk drive, and try to access the disk again. If the error message reappears, your disk has a damaged directory.

There are many causes of damaged directories, including physical damage to the disk, opening the disk drive while it is writing on the directory, and bugs and incompatibilities within ProDOS and AppleWorks. However, you do not need to under-

**Figure 2: Fixcat Error Message**

```
FIXCAT                               Processing files
V2.0                               ESC: Insert Disk

FILENAME: BAG.OF.TRICKS
FILE TYPE: DIR
STORAGE TYPE: DIRECTORY
DIRECTORY BLOCKS: $013F

FILENAME: FINDER.ROOT      FILE:$ 0001
FILE TYPE: $C9
STORAGE TYPE: SEEDLING
DATABLOCK: $01DD

TOTAL BLOCKS ALLOCATED TO FILE:$ 0001
MINIMUM VERSION NUMBER BAD
WOULD YOU LIKE IT REPAIRED? <YES>  No

Type Y or N, or use arrows to select
an option, then press RETURN.
```

**Figure 3: Fixcat "Lost Files" Message**

```
FIXCAT                               Scan for lost files
V2.0                               ESC: Scan for lost directories

WOULD YOU LIKE TO SCAN FOR LOST FILES?
<YES>  No

Type Y or N, or use arrows to select
an option, then press RETURN.
```

stand the source of the damage to recover the data on the disk.

### Disk Recovery Utilities

There are at least four popular programs that can help you recover files from disks with damaged directories.

ProSel, developed by Glen Bredon, is a popular set of program selectors and powerful disk utilities.

Resurrection is Harold Portnoy's inexpensive shareware product that recovers data from damaged disks.

Although both programs are popular with users, I like to stay with my personal favorites: Bag of Tricks 2 and Deliverance, the two programs I will describe in this article. [Ed: See the sidebar entitled "Sources" for information about these products.]

Bag of Tricks 2 runs on any Apple II system with 64K or more of RAM and one or more disk drives. The program comes on a 5.25-inch ProDOS disk, but can be transferred to either a 3.5-inch disk or hard drive.

Deliverance requires an Apple IIGS equipped with 768K or more of RAM.

Although both programs can recover data from damaged 3.5-inch, 5.25-inch, and hard disks, recovering data from an 800K disk is time consuming because these programs scan each sector on the disk. I always shudder when 3.5-inch disks arrive in the mail!

### Before You Start

Disk recovery programs re-write the directory on the disk and can permanently damage those directories. Thus, you should never work on your original damaged disk.

Start by making a backup copy of your damaged disk. Use Copy II+, the built-in Copy utility in the INIT module of Bag of Tricks, or any other program that ignores errors while copying the disk. Some programs (for example, Diversi-Copy) quit when they encounter an error on the original disk; you cannot use those programs to make your working copy of the damaged disk. Now you are ready to use Bag of Tricks or Deliverance

to recover your files.

### Using Bag of Tricks 2

Follow these steps if you use Bag of Tricks 2:

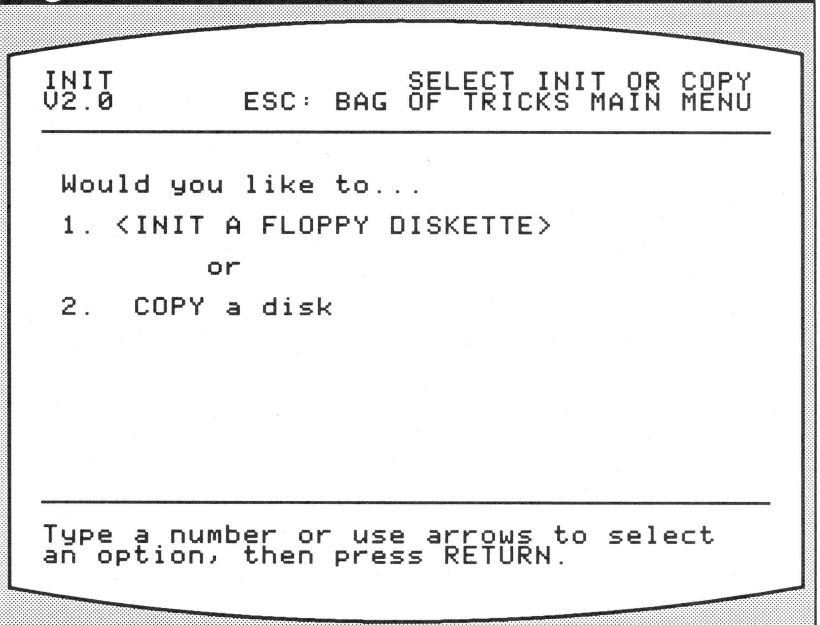
1. Boot the Bag of Tricks program disk or launch BOT.SYSTEM if you installed the program on your hard disk.
2. Select (F)ixcat from the Bag of Tricks Main Menu (see *Figure 1*).



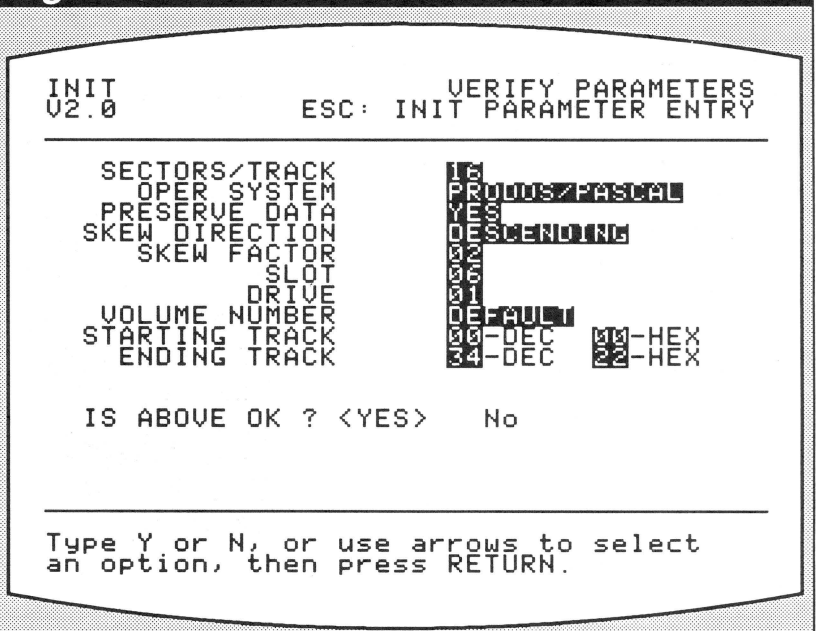
## General Interest...

3. Insert the copy of your damaged disk into any available drive.
4. If you want a printed copy of your recovery session, respond <YES> to the printer question. Otherwise, press the Return Key.
5. Press the Return Key twice more to select the default options.
6. Specify the slot and drive that contains your damaged disk. Then press the Return Key.
7. Bag of Tricks will now try to read the disk directory and will display a screen like the example in *Figure 2* when it encounters an error on the disk. Press the Return Key to accept the default options for each screen. In other words, let Fixcat try to automatically repair everything on the disk.
8. Bag of Tricks will ask your permission before updating the directory. Respond "Yes".
9. Fixcat will then ask if it should try to find lost subdirectories or files (see *Figure 3*). Respond "No" to each prompt if Fixcat already recovered your important files and if you did not create subdirectories on the disk. Otherwise, respond "Yes" and let Fixcat continue to process the disk. Press the Escape Key if you want Fixcat to look for lost subdirectories.  
  
Select the file type for each file. If you do not know the file type, select "TXT" (text). That lets you use the procedures I described in last month's article to recover your data.
10. Fixcat will now write the directory with the recovered file information in a subdirectory named RECOVER.
11. Now it is time to boot up AppleWorks and check the results. If your files appear on the Add Files Menu but do not load into AppleWorks, they might need some "tweaking" that I will describe in next month's article. Even if

**Figure 4: INIT Main Menu**



**Figure 5: INIT Parameters Menu**

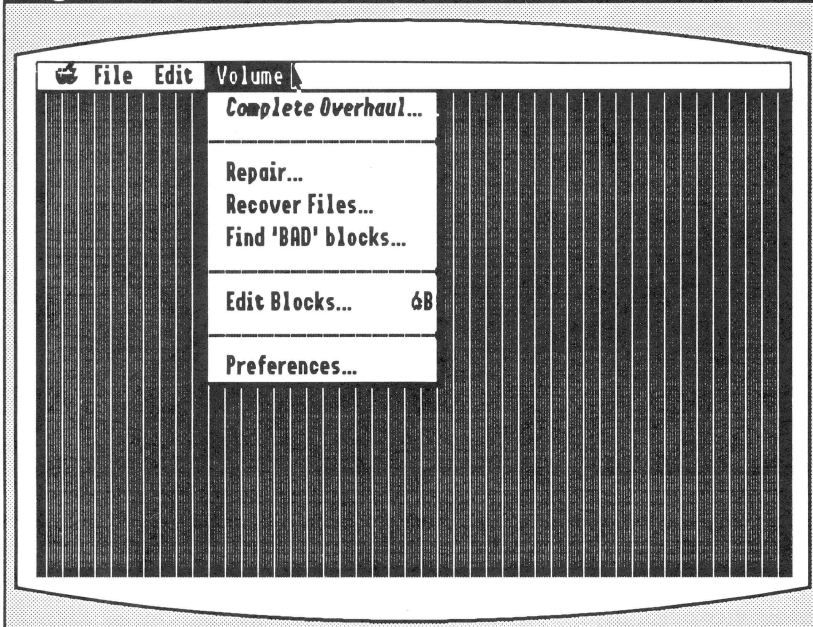


this fails, you should be able to load the data into AppleWorks as text files, as described in last month's article.

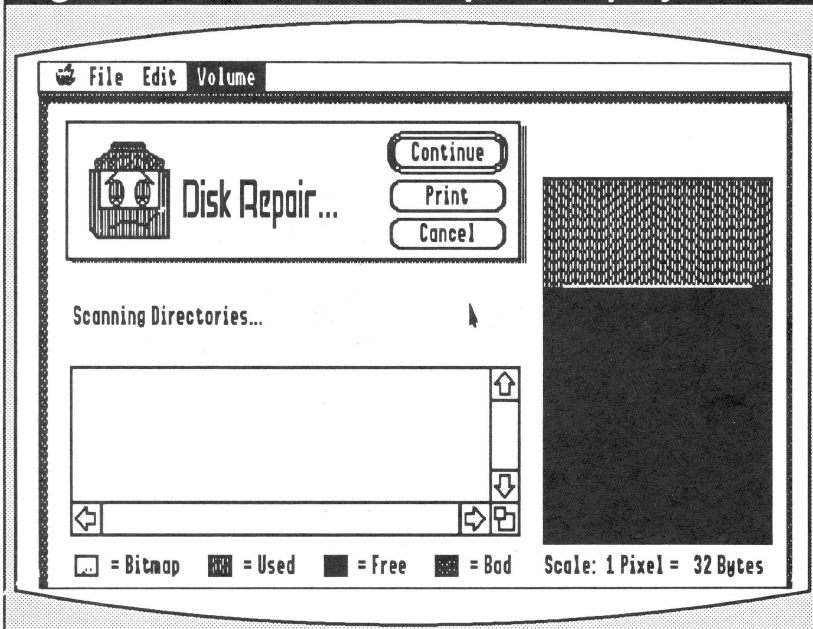
### If Fixcat Does Not Work

Some disks are too heavily damaged for Fixcat; instead of recovering the directory, the program generates a never ending list of error messages or even displays a row of characters as it "crashes" into the monitor. However, if you use 5.25-inch disks you are not defeated yet! Continue as follows:

**Figure 6: Deliverance Main Menu**



**Figure 7: Deliverance Graphic Display**



3. To recover data from AppleWorks disks, choose <INIT A FLOPPY DISK> from the menu (see *Figure 4*).

4. The Verify Parameters Menu will appear on the screen. If necessary, select “No” and change the OPER SYSTEM option to “ProDOS” (see *Figure 5*). Leave all the other parameters at their default settings with the exception of the drive number if you use drive 2.

Bag of Tricks will save whatever data it can on your disk and will restore the disk to a readable format.

4. Now re-run Fixcat and see if it can restore the directory.

Next month’s article will describe what to do if Fixcat still will not restore your disk.

### Deliverance

Apple IIGs owners can also use Vitesse’s Deliverance program to recover their disks. Deliverance is an easy-to-use 16-bit application that automates the process of disk recovery. Deliverance uses its graphical interface to present more information than Bag of Tricks. For example, Deliverance can display a disk use map, error messages, and a list of the recoverable files on the disk.

Much like Bag of Tricks, Deliverance makes all its changes on the disk, so you must work with a copy of the damaged disk.

Deliverance offers a set of powerful tools you can use to manually recover data from your disk. However, learning those tools takes years of experience and a lot of trial and error experimentation. Therefore, using those tools is beyond the scope of this article.

However, using Deliverance’s automatic mode is easy; follow these steps:

1. Launch Deliverance from the Finder.
2. Pull down the Volume Menu, choose “Complete Overhaul”, and let Deliverance do its

1. Press Control-Reset to return to the Main Menu or launch Bag of Tricks again and choose (I)NIT from the Main Menu.

The INIT program will reformat individual tracks on a 5.25-inch disk and will preserve the contents of undamaged sectors on the disk. However, Bag of Tricks only supports this feature for 5.25-inch disks; it does not offer this option for 3.5-inch and larger capacity disks.

2. Put the copy of your damaged disk in any available 5.25-inch disk drive.

### Sources

Bag of Tricks costs \$29.95 from Resource Central, Box 11250, Overland Park, Kansas 66207; (913) 469-6502; Fax: (913) 469-6507. See the AppleWorks News article on page 4 for special NAUG discounts on Bag of Tricks.

Change-A-File/Resurrection is shareware. You order either the 5.25-inch (\$4) or 3.5-inch (\$6) disk from the NAUG Public Domain Library and send the author an \$8 shareware payment. Add \$2 s/h per order. NAUG Public Domain Library, Box 87453, Canton, Michigan 48187; (313) 454-1115; Fax: (313) 454-1965.

Deliverance lists for \$69.95 from Vitesse, Inc., Box 929, LaPuente, California 91747; (800) 777-7344; Fax: (818) 813-1273. Available at discount prices from mail order dealers.

ProSel comes in two versions: ProSel-8 (for Apple II+, IIe, IIC, and IIC Plus computers) lists for \$40. ProSel-16 (for Apple IIGs computers) lists for \$89.95. Available at discount prices from mail order dealers.

work (see Figure 6). Figure 7 shows a sample screen as the program operates.

3. Make all the changes permanent after Deliverance finishes. The program will put all recovered files in a new folder (subdirectory) called "Recovered.Files".
4. Launch AppleWorks and see if you can access your data.

### When All Else Fails

The "automatic" option offered by both Bag of Tricks 2 and Deliverance provides a convenient, easy way to recover data from most damaged disks. However, next month I will describe a few "heroic" measures that let you recover data from some of the most recalcitrant media.

*[James Hirsch is a computer consultant to the Anoka-Hennepin (MN) Schools. AppleWorks continues to be one of the most-used software packages in all 40 buildings he serves.]*

### Special Member Offers

#### 1040Works

NAUG members can now get the 1991 version of 1040Works, NAUG's popular AppleWorks Income Tax templates, at a significant discount. 1040Works makes it easy to complete 23 tax forms and schedules including forms 1040, 2106, 2119, 2210, 2441, 3903, 4562, 6251, 8283, 8582, 8606, 8615, 8814, 8829 and schedules A, B, C, D, E, F, R, and SE.

Late tax filers can use 1040Works to prepare their 1991 returns. Others can use the templates to check the work of their tax preparers, collect data for the 1992 tax year, estimate their 1992 tax obligations, prepare amended returns, and become comfortable with this easy approach to income tax preparation. Buyers can update to the 1992 version of 1040Works at significantly reduced prices.

1040Works lists for \$32.95, but members can now buy the 1991 tax package for \$16.95, plus \$3.50 s/h. Order 1040Works if you have a 128K Apple II or Apple II-compatible; order 1040Works-X if you have an Apple IIGs or 256K or more of RAM in your Apple IIe, IIC, IIC Plus, or Apple II-compatible system. Specify 5.25-inch or 3.5-inch disks. Foreign orders by credit card only; postage additional. NAUG accepts Visa and MasterCard. [NAUG, Box 87453, Canton, Michigan 48187; (313) 454-1115; Fax: (313) 454-1965.]

#### AlphaCheck Plus

AlphaCheck Plus is a home and small business accounting system that works within AppleWorks. AlphaCheck Plus prints checks, produces tax reports, and balances your checkbook. The program also maintains a general ledger and prints trial balances, expense reports, vendor reports, and cash disbursement journal reports.

Until September 1, NAUG members who buy AlphaCheck Plus at the special NAUG price of \$39.95 (list: \$68) will receive Reports Plus or Payroll Plus free. Reports Plus produces customized output from AlphaCheck; Payroll Plus adds a complete payroll module to the program. Add \$3.50 s/h. [ActaSoft, 19700 Wells Drive, Woodland Hills, California 91364; (818) 996-6731.]

# A Genealogy Research Template

By Stan Hecker

**L**ike many NAUG members, Shela Fretwell uses AppleWorks to pursue her interest in genealogy. Although much of her work involves letter writing and other routine AppleWorks applications, I was impressed by the template Mrs. Fretwell developed to keep track of her genealogical census data (see *Figure 1*).

Although most genealogical applications use the data base and word processor modules, Mrs. Fretwell uses the spreadsheet module to store her data in a format that corresponds to the sequence of data captured in the microfilmed records. She also uses AppleWorks' "protection" feature to ensure that she enters the data in the correct format.

Mrs. Fretwell designed her template to store data from the 1850 federal census, which is a popular source of information for genealogists because it is the first census that lists the names of the members of each household. However, the template also accepts data from the 1850, 1860, 1870, and 1880 federal censuses, which explains the inclusion of categories for "Color" and "Value of Personal Property" not used until later years.

## Building the Template

Follow these steps to build the template:

1. Begin an AppleWorks spreadsheet named Census.Templ. Save the file periodically as you work. The template will use columns A through AA and rows 1 through 18.
2. Issue an Apple-V command and set recalculation to "manual". That will speed up the data entry process.
3. Use the Apple-L command to change the column widths from the default width of nine characters to the following widths:

Column	Width	Column	Width
A	1	O	1
B	5	P	9
C	1	Q	1
D	6	R	6
E	1	S	1
F	28	T	3
G	1	U	1
H	3	V	3
I	1	W	1
J	3	X	8
K	1	Y	1
L	3	Z	4
M	1	AA	1
N	25		

4. Use the vertical bar character to draw a vertical line down column A from row 1 through row 18. [Ed: For more information about vertical lines, see the article "How to Add Vertical Lines to a Spreadsheet" in the July 1990 issue of the *AppleWorks Forum*.]
5. Copy the vertical line into column AA on the far right of the template. (Only an "A" will appear as the column label for column AA because you made AA only one character wide.)
6. Issue an Apple-C command and copy the vertical bar into rows 5 through 17 in columns C, E, G, I, K, M, O, Q, S, U, W, and Y.

## Entering the Labels

Enter the labels at the top of the template as follows, beginning each row in column B:

1. Enter the heading FEDERAL CENSUS RECORDS in row 1.
2. Put the cursor in cell B2. Type a quotation mark and hold down the equals sign to fill row 2 with equals signs from column B through column Z.



## My Favorite Template...

**Figure 1: The Census Template in Use**

==A==B==C==D==E=====F=====G=H=I=J=K=L=M=====N=====O=====P==Q==R==S=T=U=V=W===X===Y=Z==A														
1  FEDERAL CENSUS RECORDS														
2 =====														
3  1850   June 30, 1850 Missouri - Lewis County - 48th District (MF #T-6, R #155, p. 323).														
4 ----- Married  School  Not														
5  House Family  Name  Age Sex  C   Occupation   Value RE  Bp.  in Yr.  in Year R/W														
6 ----- ----- ---- ----														
7   200  202 John SURNAME   30  m     2000  VA														
8     Mary SURNAME   29  f       VA														
9     John SURNAME, Jr.   10  m             Yes, 9mos y/y														
10														
11														
12     Remarks: John born in Albemarle County, Virginia														
13														
14														
15														
16														
17														
18 =====														

**Figure 2: The Label Cells in the Blank Template**

```

==A=B=C=D=E=====F=====G=H=I=J=K=L=M=====N=====O====P===Q===R=-S=T=U=V=W===X===Y=Z=A
1| |FEDERAL CENSUS RECORDS|
2| |=====|
3| |1850 | |Date| |State ----- Co. (MF #1, R #1, p. 1).|
4| |-----|Married| School |Not |
5| |House|Family| |Name| |Age|Sex| C | |Occupation| |Value RE| Bp. |in Yr.| in Year|R/W|
6| |-----|-----|-----|
7| | | | | | | | | | | | | | | |
8| | | | | | | | | | | | | | | |
9| | | | | | | | | | | | | | | |

```

Press the Return Key and repeat this process starting in cell N2 when your computer beeps.

- Copy row 2 into row 18.
- Fill in row 3 as follows:  
Cell B3 = 1850  
Cell E3 = vertical bar  
Cell F3 = Date  
  
Beginning in cell H3: Enter “state” and other data shown in *Figure 2*. You will change this text when you enter the census data.
- Put the cursor in cell B4. Type a quotation mark and hold down the hyphen key to fill row 4 with hyphens from column B through column Z.
- Fill in row five with the entries in *Figure 3*.
- Use the Apple-L command to center the labels for Name, Color, Occupation and Birthplace. It is easier to format the other labels by entering a

quotation mark and then pressing the Space Bar before typing the label.

- Issue a Copy Command and copy the hyphens from row 4 into row 6.
- Put the cursor in cell S4, change to the overstrike cursor, and type the labels:  
`|Married|^School|^Not^|`  
overwriting the hyphens as you work. (The caret marks (^) represent presses of the Space Bar.)

## Protect Your Work

The spreadsheet module lets you “protect” cell entries to ensure that you do not accidentally overwrite your labels. [Ed: See the article entitled “How to Change the AppleWorks Spreadsheet Defaults” for step-by-step directions that describe how to protect spreadsheet cells.] Issue an Apple-L command and use AppleWorks’ protection feature so you can enter “nothing” in cells A1-AA2, A3-E3, AA3, A4-AA6, and A18-AA18.

**Figure 3: Entries for Row Five**

<u>Cell</u>	<u>Entry</u>	<u>Comment</u>
B5	House	
D5	Family	
F5	Name	
H5	Age	
J5	Sex	
L5	C (color)	
N5	Occupation	
P5	Value RE	(value of real estate)
R5	Bp	(birthplace)
beginning T5	in Year	
beginning X5	in Year	(with one space before the label)
Z5	R/W	(for Not able to read and write)

## Set the Options

Now you will format your output. Issue an Apple-O command and make the following format changes:

1. Set the characters per inch (CI) to 17.
2. Turn off the report header (RH).
3. Issue an Apple-P and print the template. Make any necessary corrections and save your work.

You can now use a disk utility program to lock the file. [Ed: For step-by-step directions, see the article entitled "How to Lock Your Templates", in the May 1991 issue of the **AppleWorks Forum**.]

## Using the Template

Managing the many files you will create from this template requires some attention.

Start by adding the template to your desktop and use the Apple-N command to assign a new name to the file. Each copy of the template will track a different family, so you will want to assign a meaningful name to the file.

This is not the place to begin learning about genealogy, but hobbyists familiar with census data will recognize how to fill in the template. Follow these steps:

1. Enter the date of the record in cell F3.
2. Use the over-strike cursor to enter the state and county and the microfilmed reference information. Begin in cell H3, writing over the generic words on the screen.

3. Enter the dwelling number in cell B7.
4. Enter the family number in cell D7.
5. Enter the family names, in column F.

Figure 1 depicts the entries for a small family; the typical nineteenth century listing will include several children. You can use the extra rows for notes and any other information the enumerator wrote into the record. Delete some of the extra rows if you do not need the space.

You can also expand the template to accommodate large families by copying the data entry rows to the clipboard and then copying them back into the same template from the clipboard without moving the cursor.

Mrs. Fretwell included all the major census categories in the order that they appear on the census forms. With a little practice, you will be able to enter data accurately and quickly.

[Shela S. Fretwell, who has authored four books based on her genealogical findings, began researching her family in 1976. Mrs. Fretwell is currently gathering data about all the Fretwells in the United States since 1665.

Stan Hecker is on the administrative staff at Michigan State University, East Lansing, Michigan, and is a partner in H&H Consulting, a Michigan concern specializing in school district financial and population analyses.

A working copy of this template appears on this month's **NAUG on Disk**, which costs \$10 from **NAUG**.

**NAUG** plans to release a genealogy template disk with templates and files suggested by members. Please send your genealogy templates, articles, and other items for the disk to: Genealogy Collection, **NAUG** Public Domain Library, Box 87453, Canton, Michigan 48187.]

# A Clipboard Window Macro

by Barclay Clemesha

---

*Sophisticated UltraMacros programmers are always looking for ways to improve AppleWorks. This month, Barclay Clemesha demonstrates how to use the power of UltraMacros to enhance the AppleWorks 3.0 clipboard. His article should inspire other UltraMacros programmers to elaborate on these techniques.*

---

**T**he AppleWorks clipboard, which contributes so significantly to the power of AppleWorks, suffers from three limitations. First, there is no easy way to determine what is on the clipboard. Second, you cannot add text to the clipboard; new text always replaces the previous clipboard contents. Third, you cannot transfer selected text from the clipboard to the desktop. You must transfer all the clipboard text onto the desktop, or none at all.

This article describes a set of macros that overcome these limitations.

## How to Use the Macros

The macros (see *Figures 1* and *2*) reserve a part of the AppleWorks 3.0 word processor screen for use as a visible clipboard. To use the clipboard, you scroll through the document until the text you want to capture is at the bottom of the screen. Then you put the cursor on the top line of the text you want in the clipboard and issue a <sa-W>. That highlights the bottom lines on the screen, freezes your text in the highlighted clipboard window, and moves the cursor up into the portion of the screen still used for the word processor.

To add lines of text to the clipboard, you put the text in the line immediately above the highlighted window, put the cursor in the top line of the text you want to add to the clipboard, and issue another <sa-W>. Of course, the more you add to the clipboard window, the less room you leave for normal text.

To use the text on the clipboard, put the cursor where you want the clipboard text to appear in the document and enter a <sa-C>. That “selects” (and “un-highlights”) the top line of text on the clip-

board. Use the Up Arrow and Down Arrow Keys to select the line you want, and press the Return Key. If you want to transfer a series of consecutive lines, just keep pressing Return.

The <ba-W> command deletes the clipboard window and restores your screen to its normal settings.

## Navigating on the Screen

You must be careful when navigating up and down the screen with the clipboard active. The Up Arrow, <oa-up>, and <oa-down> key combinations work normally. However, the Down Arrow Key

**“The clipboard macros overcome three limitations in AppleWorks.”**

does not. If you use the Down Arrow Key to scroll to the bottom of the screen, the window will start to scroll up the screen with your text. The trick is to use the <oa-down> or <sa-down> key combinations to scroll down the text and then use the Arrow Keys once the text you want is on the screen.

(The <oa-down> key combination leaves your cursor at the bottom of the screen. The <sa-down> macro scrolls down one screen and leaves the cursor at the top of the screen.)

Issue a <ba-W> command if the highlighted window starts to scroll up the screen or if anything else you do not expect happens to your document.

## Changing the Window

The macros reserve a part of the AppleWorks word processor screen for use as a clipboard by redefining the bottom screen margin in the AppleWorks console driver. [Ed: The console driver is the part

## Advanced Techniques...

*of AppleWorks that controls input from the keyboard and output to the monitor.]*

Location \$AA in zero page memory determines the bottom margin on the AppleWorks 3.0 word processor screen. Since AppleWorks' word processor usually uses lines zero through 21 on the screen, AppleWorks normally stores the value of 21 in location \$AA. Changing the value of this byte changes the word processor's bottom margin. For example, change the contents of that byte to 19, and AppleWorks will no longer use the last two lines on the screen. That lets you use those lines to store text. Then you can use UltraMacros' <screen> command to transfer part or all of the text displayed in the clipboard window at the bottom of the screen into your word processor document.

However, UltraMacros addresses the zero page in *alternate memory*, and the byte that controls the lower margin is in *main memory*. As a result, you cannot use UltraMacros' <poke> command to insert a new value at this location. However, you can work around this problem by poking a short

machine language program into an unoccupied part of memory. Calling that program from a macro with UltraMacros' <call> command activates the main zero page, stores the appropriate byte at \$AA, and then reactivates the alternate zero page so UltraMacros can continue its work.

### How the Macros Work

Macro <sa-#> (see *Figure 1*) pokes the machine language program into memory, starting at address \$A50 (where AppleWorks leaves 128 bytes free) and then calls that program. The machine language routine stores the byte it finds located at \$A5E in \$AA, so all you need do is poke the appropriate lower margin value into \$A5E before calling the macro.

Macro <sa-W> creates a clipboard window from the present cursor position down to the bottom of the screen. It does this by poking the current vertical cursor position minus one into \$A5E before calling the subroutine macro <sa-#>. The <sa-W> macro "captures" everything on the screen below

**Figure 1: Macros that Open and Close the Clipboard Window**

```
#:<asr : { Poke the ML program that changes the bottom screen margin. }
pokeword $a50, $8d48 : { PHA }
pokeword $a52, $c008 : { STA $C008 }
pokeword $a54, $5ead : { LDA $0A5D }
pokeword $a56, $850a :
pokeword $a58, $8daa : { STA $00AA }
pokeword $a5a, $c009 : { STA $C009 }
pokeword $a5c, $6068 : { PLA, RTS }
call $a50 { Call this ML program. }
>!

W:<all : { Define the macro that creates the clipboard window. }
i = peek #curver - 1 : { Store the vertical cursor position in variable i. }
if i > 2 : { Leave at least two text lines at the top of the screen. }
row = i + 2 : { Store the location of the top of the window in the variable "row". }
up : up : { Move out of the window area. }
poke $a5e, i : { Poke the desired bottom margin into $a5e. }
sa-# : { Call the subroutine that sets the bottom margin. }
highlight 1, row, 80, 22 { Highlight the clipboard window. }
>!

<ba-W>:<all : { Define the macro that restores the normal screen. }
poke $a5e, 21 : { Restore the original value in $a5e. }
sa-# : { Call the subroutine that resets the bottom screen margin. }
display #off : { Blank the display. }
oa-d : display #on : esc : { Update the screen and turn on the display. }
>!
```



## Advanced Techniques...

the current cursor position. It also highlights the clipboard window and moves the cursor up out of the window area.

The <ba-W> macro returns the screen to its normal settings by poking a 21 into \$A5E and calling <sa-#>. The <oa-D> followed by the <esc> in the <sa-W> macro forces AppleWorks to update the screen; that removes the highlighted screen window.

The macro set in *Figure 1* requires only 107 bytes in the macro table and lets you view two parts of a

document simultaneously. However, to turn this window into a useful clipboard, you must be able to copy text from the clipboard window back into a document.

The <sa-C> macros in *Figure 2* use UltraMacros' <screen> command to do this. The main macro lets you use the Arrow Keys to highlight one line of the clipboard window at a time. Pressing the Enter Key causes the macro to read the highlighted line into variable \$1 and then jumps to the <sa-C> subroutine.

**Figure 2: Macros that Copy from the Clipboard Window to the Desktop**

```
C:<asr :      { Define the subroutine that "prints" the line in the document.      }
n = 79 :      { Set the variable that stores the number of characters on the line.      }
begin :      { Begin the loop that counts the extra spaces at the end of the line.      }
  $2 = mid $1, n, 1 :      { Store the last character on the line in variable $2.      }
  if $2 = " " : n = n - 1 :      { If that character is a blank, reduce the number of characters by 1.      }
rpt :      { Repeat the loop if the last character is a blank.      }
endif :      { If the last character is not a blank...      }
b = asc $2 :      { ...store the ASCII value of the last character in variable b.      }
if b = 127 :      { If the last character is a Return blot...      }
c = n - 1 :      { ...store the position of that character in variable c...      }
$1 = left $1, c :      { ...store all except the last character in variable $1...      }
$1 = $1 + chr$ 13 : endif :      { ...and add the ASCII code for a Return to the end of the line.      }
n = n + 1 : $1 = left $1, n :      { Remove the excess space from the end of the line.      }
print $1 :      { And "print" the line into the document.      }
>!
```

```
C:<awp :      { Define the macro that copies the clipboard window into the document.      }
a = row :      { Store the location of the top of the clipboard window in variable a.      }
if a < 3 then stop :      { Check for a valid line number.      }
begin :      { Begin the loop that lets you move the highlight and copy the line.      }
  if a < row: a = a + 1 : endif :      { If the cursor is at the top of the window, end the loop.      }
  if a > 22 : a = 22 : endif :      { If the cursor is at the bottom of the window, end the loop.      }
  hilight 0, a, 80, a:      { Highlight the current line.      }
  key = key : hilight 1, a, 80, a:      { Wait for and capture the keystroke and restore the highlight.      }
  if key = 10: a = a + 1 :      { If the keypress is a Down Arrow, move down one line...      }
  rpt : endif :      { ...and wait for the next keypress.      }
  if key = 11: a = a - 1 :      { If the keypress is an Up Arrow, move up one line...      }
  rpt : endif :      { ...and wait for the next keypress.      }
  if key = 13 :      { If the user presses the Return Key...      }
  $1 = screen 1, a, 80:      { ...read line into variable $1.      }
  sa-C :      { Call the subroutine that "prints" the line into the document.      }
  a = a + 1 : rpt :      { Move down to the next line and wait for the next keypress.      }
>!
```

```
<sa-down>:<awp :      { Define the macro that scrolls the text up the screen.      }
m = peek #curver:      { Capture the vertical cursor position.      }
ifnot m = 1 then oa-down : endif :      { If the cursor is not at the top of the window, move it there.      }
oa-down :      { Page down.      }
oa-up :      { Jump to the top of the screen.      }
up :      { Scroll down to the next line.      }
>!
```

## Advanced Techniques...

The subroutine ignores any extra spaces at the end of the line. This is necessary because the <screen> command always reads the entire line, even though it might only contain a few characters of text.

Then the subroutine checks for a Return "blot" at the end of the line. The Return "blot" has an ASCII value of 127, which is the value assigned to a press of the Delete Key. Thus, "printing" this character would delete the previous character on the screen. For this reason, the subroutine substitutes an ASCII 13 (a Return) for the 127. It then deletes any extra spaces it found and "prints" the line on the screen, starting at the present cursor position.

After printing the line, control returns to the main macro, which moves down one line in the clipboard window and repeats the process. Pressing the Escape Key ends the macro.

### Limitations

The clipboard window macro provides a useful enhancement to the AppleWorks word processor, but you should be aware of its peculiarities and limitations.

First, the UltraMacros <screen> command that the macro uses to copy text from the clipboard window into a document reads literal screen bytes. Thus, it converts embedded print commands designated by carets (such as boldface begin) to caret characters in the copied text.

In addition, the macro ignores all print commands and tabs because it only captures the characters on the screen. However, the macro successfully captures Returns as long as you are zoomed in when you freeze the text on the clipboard window.

As explained earlier, changing the value of the zero page byte at \$AA lets you change the size of AppleWorks' word processor window. When you use the Up Arrow Key (which scrolls the text down toward the bottom of the screen), the text scrolls off the screen as it reaches the clipboard window. That leaves the window intact.

As described above, this does not work when you use the Down Arrow (which scrolls text up the screen). As soon as the cursor reaches the edge of the clipboard window, the window also starts to scroll up. To avoid losing the clipboard window,

you must use <oa-down> to page up and then move the cursor to the line on which you want to work. That does not disturb the window. The <sa-down> macro makes this easier by paging the screen up and then moving the cursor up to the text that was on the last line of the text window before you invoked the macro.

Note that this problem only occurs if you use the Down Arrow Key or issue a Return with the cursor on the line immediately above the clipboard window. It also happens if UltraMacros issues the Return, so be careful when copying text containing Returns from the clipboard window. This situation does not occur in normal typing; unless you issue a Return, AppleWorks always leaves one blank line at the bottom of the text screen.

### Conclusion

The macros in this article change one of AppleWorks' internal parameters and thus reserve part of the word processor screen. You can then use this window as a visible clipboard and use UltraMacros' <screen> command to transfer text from the clipboard window into a document.

*[Dr. Barclay Clemesha is an atmospheric physicist with the Brazilian Space Research Institute. He writes Apple II software in his spare time.]*

*[A working copy of this macro appears on this month's NAUG on Disk, which costs \$10 from NAUG. These macros require AppleWorks 3.0.]*

### AppleWorks News

Resource Central announced that it will host the A2-Central Summer Conference from July 21 - 26 in Kansas City, Missouri. The conference includes three events:

**July 21 - 22:** Two-day developer colleges on programming graphics and sound, and programming in Pascal and C.

**July 23 - 24:** Kansasfest; a two-day series of sessions for Apple II programmers and developers.

**July 25 - 26:** Apple Central Expo; a popular user-oriented show with meetings and vendor displays.

Contact Resource Central for more information.

*[Resource Central, Box 11250, Overland Park, KS 66207; (913) 469-6502; Fax: (913) 469-6507.]*

# A Macro that Deletes Duplicate Records

by Keith Johnson

**A**nyone who maintains a mailing list knows how difficult it is to identify and remove duplicate records from the file. Yet this is one of the tedious, but important tasks involved in data base file management.

This month's macro detects and deletes those duplicate records. The macro, developed by NAUG member Joe Walters, offer some interesting features that are not usually found in similar macros from other sources.

For example, this macro lets you define from one to five categories that it will check for duplication. The data in *all* these categories must be identical before the macro recognizes that the two records are duplicates.

The macro is longer than the usual offering in this column, so proofread your typing carefully before compiling the macro. Test the macro on some dummy files before you use it with any important data. The main macro appears in *Figure 1*; the sub-routine macros appear in *Figure 2*.

## How to Use the Macro

Follow these steps to use the macro:

1. Add all the macros to your default macro file and compile the file using the Macro Compiler. Then save the macros as your default macro set. (See page 19 of the April 1992 issue of the *AppleWorks Forum* for step-by-step directions that describe this process.)
2. Add the data base file you want to check to your desktop and display the file on the screen.
3. Use the Apple-A command to sort the file so the duplicate records are together in the file.

4. Put the cursor on one of the categories you want to check and press <sa-G> to launch the macro.
5. The macro displays a message asking if it should prompt you to confirm each deletion. Press "Y" if you want to examine the records before deleting the duplicates. Press "N" to automatically delete all duplicate records. Press the Escape Key to cancel the macro.
6. The macro asks how many categories you want to compare. Type a number between one and five.
7. The macro adds the current category to its list of comparison categories and asks you to identify the next category. Use the Tab and Apple-Tab Keys to put the cursor on a category you want to add to the comparison list and press the Return Key. Repeat this step for all desired categories.
8. The macro now searches for duplicate records and either asks you to confirm the deletion or automatically deletes the duplicate records. Then it displays a message to indicate that it is done.

## How the Macro Works

When seen as an entity, this macro appears complex. However, the macro consists of a series of easily understandable operations. Each numbered section below corresponds to the section designator in the macros. *Figure 3* summarizes the contents of each variable.

- ① The macro starts by asking if the user wants prompting and sets variable p based on the user's response (p = 1 for prompting, p = Ø for no prompting).



**Figure 1: Macro that Deletes Duplicate Records**

```

G:<adb><                                { Define the macro.                                }
p = 1 :                                { Set the default so prompting is on.          }
msg ' Prompt before deleting? [Y/N/ESC] (Default is Y) ' : { Ask for the user's prompt choice.    }
ba-Y :                                { Call the subroutine that captures the keypress.  }
if a = 27 then endmacro :               { Stop if the user presses the Escape Key. }
else if a = 78 then p = 0 :             { Set p = 0 if the user chooses no prompting. }
endif :                                { Otherwise, prompting is on.                }
zoom :                                { Display multiple record layout.          }
1 msg ' How many categories will be checked? 1-5 ' : { Ask how many categories.            }
ba-Y :                                { Call the subroutine that captures the keypress.  }
if a < 49 or a > 53 :                   { If not in the range of 1-5...        }
msg ' Invalid! Press a Key ' :          { ...display an error message...       }
bell : ba-Y : stop : endif :           { ...sound the bell, wait for a keypress, and stop. }
c = a - 48 :                            { Convert the keystroke from an ASCII value to a number }
                                         { between 1-5.                                }
oa-9 :                                { Go to the last record.                }
posn d,v :                             { Capture the current category number and last record number. }
2 v = v - 1 :                           { Decrease the number of records to be checked by one.    }
oa-1 :                                { Go to the first record.              }
x = 2 :                                { Initialize the variable for the second category.        }
a = 0 :                                { Initialize variable a.                }
begin :                                { Begin loop that captures the cursor position of each category. }
if c > 1 then :                          { Skip the next step if the user indicated only one category. }
3 msg ' TAB or OA-TAB to next category, then press Return. Esc quits ' : { Display the instructions.            }
ba-Y : endif :                          { Call the subroutine that captures the keypress.          }
if a = 9 then tab : endif :              { Move to the next category if the user pressed Tab.      }
if a = 137 then oa-tab : endif :         { Move to the previous category if the user pressed oa-Tab. }
                                         { If the user pressed Return...            }
if a = 13 and x = 2 then posn e,z : endif : { ...capture the cursor position of category #2, or... }
if a = 13 and x = 3 then posn f,z : endif : { ...capture the cursor position of category #3, or... }
4 if a = 13 and x = 4 then posn g,z : endif : { ...capture the cursor position of category #4, or... }
if a = 13 and x = 5 then posn h,z : endif : { ...capture the cursor position of category #5, or... }
if a = 27 then stop : endif :           { If the user pressed the Escape Key, quit.                }
if a = 13 : x = x + 1 : endif :          { Increment the category counter.          }
ifnot x > c then rpt : endif :           { Repeat the loop if it is not finished.        }
begin :                                { Begin the loop that checks adjacent records.            }
t = 1 :                                { Tell variable t that this is the first category.        }
y = d :                                { Set variable y equal to the first of the 5 category numbers. }
sa-H :                                { Call the subroutine that compares the adjacent records.  }
5 if w = 1 :                            { If w = 1, they match.                                    }
ifnot t > c :                            { If you are not checking the last category...            }
then y = e : sa-H : endif :             { ...then check the next one.                        }
if w = 1 ifnot t > c then y = f : sa-H : endif : { Store current category number in variable y.            }
if w = 1 ifnot t > c then y = g : sa-H : endif :
if w = 1 ifnot t > c then y = h : sa-H : endif :
down :                                { Move to the next record.                            }
if p = 1 and w = 1                      { If prompting is on and the records match...            }
then msg ' Delete this record? Y/N/ESC ' : { ...prompt the user...                                    }
bell : ba-Y :                          { ...sound a beep and capture the keypress.              }
endif :
if p = 1 and w = 1 and a = 89            { If the user pressed "Y"...                              }
then ba-H : endif :                    { ...launch the subroutine that deletes the record.        }
6 if a = 27 then endmacro : endif :      { If the user pressed the Escape Key, stop.              }
if p = 0 and w = 1 ba-H : endif :       { If prompting is off, delete the record.                  }
v = v - 1 :                             { Decrement the record counter.                          }
if v = 0 then :                         { If all records have been checked...                    }
msg ' All done. Press a key ' :         { ...display a message...                                  }
bell : ba-Y : stop :                   { ...sound the bell, accept the keypress, and stop.        }
endif : rpt>!                           { Otherwise, continue with the next record.              }

```



## Figure 2: Subroutines

Subroutine that deletes a record

```
<ba-H>:<asr><
oa-D : rtn :           { Delete the current record.           }
if v > 1 then up :      { If not on the last record, go up one.    }
endif>!
```

Subroutine to check the same category in two records

```
H:<asr><
w = 0 :                { Set the default to "No match".        }
t = t + 1 :            { Increment the category number.        }
first :                { Put the cursor on the first category in the record. }
7 begin :              { Begin the loop that finds the desired category. }
    posn x,z :          { Store the current category number in variable x. }
    if x = y exit :      { Return to the main macro if you are in the correct category. }
    endif : tab :       { Otherwise, tab to the next category... }
    rpt :               { ...and repeat the loop. }
    cell :              { Read the contents of the category into variable $0. }
    $1 = $0 :           { Copy the contents into variable $1. }
    down :              { Go to the same category in the next record. }
    cell :              { Read the contents of the category into variable $0. }
    if c > 1 :           { If you are checking more than one category... }
    8 and $0 = $1 :      { ...and the two are identical... }
    then w = 1 : endif : { ...set w = 1 to indicate a match. }
    if c = 1            { If you are checking only a single category... }
    then ifnot $0 = ""   { ...and the contents of the category is not blank... }
    then if $0 = $1 :    { ...and if the two match... }
    w = 1 : endif :      { set w = 1 to indicate a match. }
    up : >!             { Go back to the previous record to get ready to check the next category. }
```

Subroutine to get a keypress and convert to upper-case if necessary

```
<ba-Y>:<asr><
a = key :              {Store the ASCII code of the keypress in variable a. }
if a > 96 and a < 123  { If the keystroke is a lower-case character... }
then a = a - 32 : endif : { ...subtract 32 to convert to the upper-case equivalent. }
msg "" >!             { Blank the message line. }
```

## Figure 3: Table of Important Variables

Variable	Contents
p	Prompting flag. 1 = macro will prompt user for confirmation; 0 = it will delete records without prompting.
a	Temporary variable; often the ASCII value of a character resulting from a keypress in subroutine ba-Y.
c	Number of categories used for comparison (1-5).
d, e, f, g, h	Stores the five categories used for comparison (obtained using <posn> command).
t	Current active category number in sa-H subroutine.
w	Match flag. 1 = two records match; 0 = records don't match.
x	Temporary variable; often the category number currently being processed.
y	Temporary variable; often the current category number.
v	Record number of last record in file; later, number of records remaining to be checked.
\$0, \$1	String variables that store the contents of categories being compared.

## My Favorite Macro...

The user then indicates how many categories the macro should compare. The macro captures that keypress, converts the entry from the ASCII value of the keystroke into a number between one and five, and stores that value in variable c.

- 2 This sequence captures the current category number and determines the number of records in the file. (The macro assumes that you want to compare the category the cursor is on when you launch the macro.)

The <posn d,v> command stores the current category number in variable d and the record number in variable v. *[Ed: AppleWorks assigns a number to each category starting with the first category you create, which is assigned the number "1". AppleWorks displays the categories in category-number order when you issue an <oa-N> command.]* v = v - 1 initializes variable v as a counter for the remaining number of records for the macro to check.

- 3 The category choice continues. Variable x stores a number between two and five that represents which category you will choose next. It starts with the value of two, since you already made the first choice. Variable a gets a value of 0 for a reason discussed below.

The macro starts a loop that lets you select the remaining categories. If c > 1, the user wants to choose more than one category; the macro displays a message describing how to proceed. Subroutine <ba-Y> accepts a keypress and converts all lower-case characters to upper-case.

The macro uses <if> statements to decide what to do with the keystroke. If the user pressed <Tab> or <oa-Tab> the cursor moves one column to the right or left, and the loop starts over.

- 4 Pressing the Return Key (a = 13) indicates that you want to add the current category to the list. That initiates a series of more complex tests.

The macro first tests the value of the variable x. If x = 2, it stores the current category number in variable e. If x = 3, it stores the current category number in variable f, and so on through variable h.

The macro stops if the user pressed the Escape Key (a = 27).

If the user pressed the Return Key, the line

```
if a = 13 : x = x + 1 : endif
```

increases the value of x by one. The next time through the loop, the macro will assign the new category number to the next variable in the range e - h.

Finally, if x does not exceed c, the macro must still capture at least one more category number, so it repeats the loop.

The loop restarts from this point if the user enters an inappropriate keystroke. However, including the if = 13 test ensures that the macro does not change the value of x if the user pressed the wrong key.

If x is larger than c, we are finished choosing categories, and the macro continues on to the next section.

Now you can see why the macro sets a = 0 at the beginning of this section. If you only want to compare one category, setting a = 0 tells the macro not to perform any changes in the eight "If Statements" in this section. At the end, x = 2 and c = 1, so the macro continues.

- 5 The macro now begins the comparison process. Variable t will count the number of categories checked each time the macro compares a pair of records. The macro initializes t to 1.

Variable y will keep track of the category being processed. The statement y = d stores the first category number in variable y.

The main macro calls subroutine <sa-H>, which checks the contents of the current category in the first record with the contents of the next record. If they match, the subroutine sets w = 1. Otherwise, w = 0.

The main macro then uses "ifnot t > c" to test if it just examined the last category. If not, it sets the value of temporary variable y to the value of e, which stores the category number of the next category you want to test. It then calls the <sa-H> subroutine which tests for a match in that category. Again, if it finds a match, the subrou-

## My Favorite Macro...

time sets  $w = \emptyset$ .  $w = 1$  indicates no match.

The macro then repeats this process for variables  $f$ ,  $g$ , and  $h$ , which store the category numbers for the third, fourth, and fifth categories respectively.

- 6 This segment of the macro performs the actual deletion. If prompting is on ( $p = 1$ ) and the records match ( $w = 1$ ), the macro asks the user to approve deleting the second of the two records. If the user presses “Y” or “y”, the <ba-H> subroutine performs the deletion. Pressing the Escape Key cancels the macro.

If prompting is off ( $p = \emptyset$ ), the macro deletes the duplicate record.

Then the macro decrements the record counter ( $v = v - 1$ ) and tests to see if it reached zero. If so, it displays a message and waits for a keypress. Then it erases the message and stops.

If  $v$  is not yet zero, the macro starts the loop beginning at Section 5 over again. This is the end of the main macro.

- 7 Subroutine <sa-H> compares the contents of the same category in two records.

The macro starts by setting  $w = \emptyset$  to indicate no match. It then increments the number of the currently active category (the contents of variable  $t$ ) by one, moves the cursor to the left-most category on the screen, and starts a loop that finds the category stored in variable  $y$ .

The <posn  $x,z$ > command stores the current category number in  $x$  and the record number in  $z$ , but the macro does not use the data in variable  $z$ . If the contents of  $x = y$ , you are in the correct category and the macro skips to Section 8. If not, the macro tabs to the next category and repeats the loop.

- 8 The cursor is now on the desired category. The macro stores the contents of this category in string variable  $\$1$ , moves the cursor down to the next record, and reads the contents into  $\$0$ .

If you chose more than one category and the macro finds that the two strings are identical, it sets  $w = 1$ , indicating a match. It then skips to

the <up> command at the end of the macro, which restores the cursor to the first of the two records and then returns to the main macro.

If you chose only one category to test, and if both entries are not blank, the macro sets  $x = 1$ , moves the cursor up to the previous record, and returns to the main macro.

### Tips and Extensions

One of the tricks to using this macro is to make certain that all your important categories fit on a single multiple record layout screen. Otherwise, moving the cursor will scroll the screen so you cannot see the data you need to confirm the deletion.


Thus, if you want to confirm the deletions, issue an <oa-L> command and temporarily change your layout so all the important categories appear on the unscrolled screen. Then use the macro to delete the duplicate records before you restore your original multiple-record layout. Creative macro writers can add those steps to the macros in *Figures 1* and *2*.

You can also modify the macro so it tells you how many records it deletes. Just add “ $n = \emptyset$ ” to the beginning of the macro and add the line “ $n = n + 1$ ” to the <ba-H> subroutine. Then change the final message so it reports the value of “ $n$ ”.

*[Keith Johnson is Associate Director of the Fleischmann Planetarium at the University of Nevada.]*

*Joe Walters is a programmer for Bell Laboratories in Naperville, Illinois.*

*A working copy of these macros appears on this month's NAUG on Disk, which costs \$10 from NAUG. The macros require AppleWorks 3.0.]*

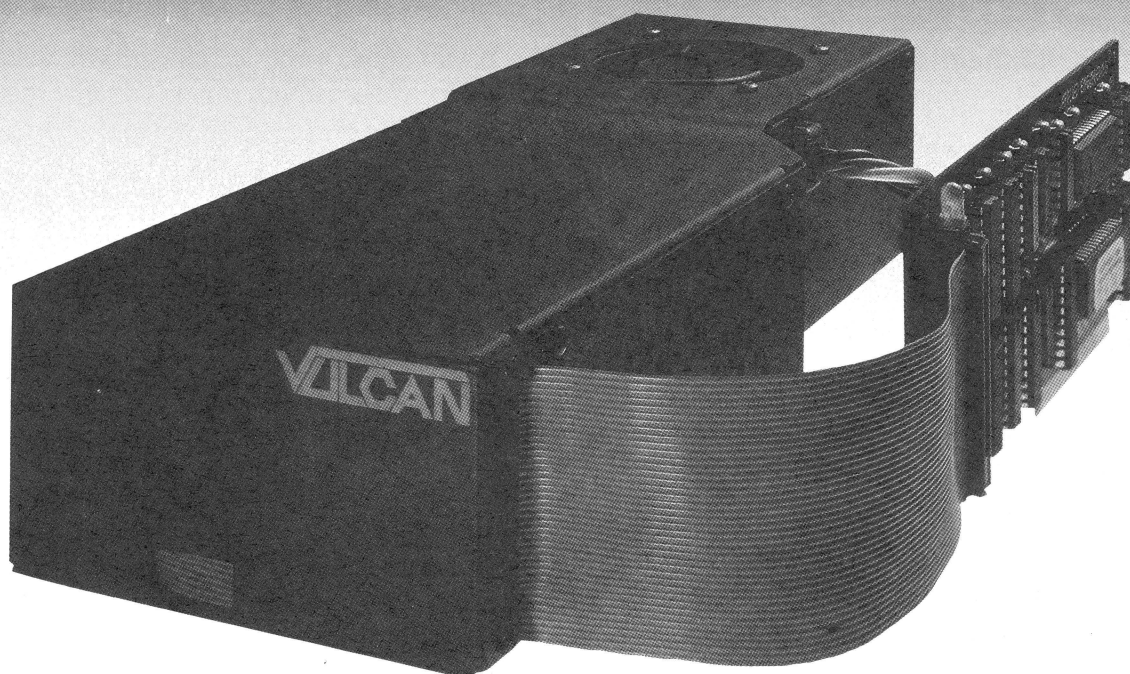


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# TimeOut DiskTools: Valuable Disk Utilities

by John A. Nunnikhoven

**D**iskTools, the latest of a series of AppleWorks enhancements from Office Productivity Software, consists of three TimeOut modules. Two modules make it easy for AppleWorks users to maintain backups of their hard or floppy disks. The third module provides ShrinkIT-type archiving within AppleWorks.

The DiskTools disk also includes TO.About.Time (which adds useful time and date functions to AppleWorks) and TO.Calendars (a perpetual calendar developed by Bruce Shanker).

I tested DiskTools on an enhanced Apple IIe equipped with a one-megabyte RamWorks III card, TransWarp accelerator, 20 megabyte Sider D2 hard drive, and an Apple 3.5-inch drive. DiskTools requires AppleWorks 3.0 enhanced with TimeOut.

## An Overview

Like many AppleWorks users, I concentrate on my daily work and leave the routine housekeeping chores until the day after tomorrow when things will be less hectic. On several occasions, my relaxed style has caused me hours of extra work re-creating lost or damaged files.

DiskTools' Volume Backup and File Backup utilities make it easy to prepare daily file backups and periodic volume backups; that encourages me to make regular backups of my work.

Although it is not used in the backup process, DiskTools' Archive is a welcome addition to the

**Figure 1: Volume Backup Screen**

```
File: DISKTOOL.TXT          VOLUME BACKUP          Escape: Choose Drives
=====
This volume contains 2981k of data.
You should have 3 blank disks ready

Master: /HARD1
Slot 7, Drive 1, 5Meg

1. >> Back-up >>
2. << Restore <<

Back-up Disks:
Slot 5, Drive 1, 800K

TimeOut Volume Back-Up Version 1.0
Copyright 1992, Douglas Gum

-----
Type number, or use arrows, then press Return          416K Avail
```

AppleWorks downloader's library and is ideal for TimeOut TeleComm users. Archive compresses and decompresses ShrinkIT files from within AppleWorks. That eliminates the need to quit AppleWorks, boot ShrinkIT, open the archive, quit ShrinkIT, boot AppleWorks and load the decompressed file to see what you downloaded. Archive also provides a convenient way to archive large files that you want to keep for permanent storage.

## Installation

Installing the DiskTools modules is easy. You can either copy the modules onto your TimeOut applications disk or directory, or use the BASIC program provided with DiskTools to do the necessary copying.

Launching the modules involves issuing an Open-Apple-Escape and selecting the appropriate module from the TimeOut Menu.

**Figure 2: File Backup's Data Base**

```
File: BU.DATA                      REVIEW/ADD/CHANGE          Escape:Main Menu
Selection: All records
Record 6 of 87  (87 selected)
-----
Source PathName: /hard2/appleworks/seg.er
      Type: File
      No./Files: 1
      Space Used: 3

Back-Up PathName: /IBU.01/hard2/appleworks/seg.er
      Volume: /IBU.01              BU Date: Mar 26 92
      No./Files: 1                  BU Time: 11:03 AM
      Space Used: 4

      Del Orphans: -
      Watch Subs: -   Del Old Files: -
      All Files: -    Repl Same: -
      Sparse Files: -  Repl Newer: -

-----
Type entry or use ⌘ commands                                396K Avail.
```

## Volume Backup

DiskTools' Volume Backup simplifies the process of backing up your hard drive. Configuring the program is easy; you use the TimeOut Utilities to specify your default source and backup drives. You also indicate whether you want to use desktop memory as a buffer, use data compression, and whether you want to back up all the blocks on the source volume.

When you launch Volume Backup, the program lets you override your defaults and displays a message that estimates the number of disks required for the backup (see *Figure 1*). Then you choose either the backup or restore option, swap disks as indicated, and relax while Volume Backup does its work. Backing up a five megabyte partition on my hard drive requires 20-25 minutes.

## Limitations

The most important criteria for a backup program are reliability, speed, and convenience. Volume Backup performed admirably in all three of these important dimensions. The limitations I encountered were minor. For example, Volume Backup occasionally underestimated the number of disks needed for the backup. That is not a problem because Volume Backup can format additional 3.5-inch disks as needed. However, 5.25-inch disk users will need to keep extra pre-formatted disks handy; the program cannot format those disks.

Volume Backup would be more convenient if the program sounded a bell when you need to change disks. At times, the system had to wait for me to notice that it was ready for the next disk.

Backing up a hard drive onto 5.25-inch disks is tedious and time consuming with any backup program, and Volume Backup offers no magical solutions for that problem. A 3.5-inch drive is a valuable part of any hard disk-equipped Apple II system.

## File Backup

DiskTools' File Backup offers all the elements you need to maintain file-by-file backups of your hard disk. File Backup provides for incremental backups of active files, lets you determine which files you store on each backup disk, maintains a data base you can use to find your backups, and automates your daily file backup to the point that even the most casual user has no valid excuse for maintaining unprotected files.

File Backup's AppleWorks data base (BU.DATA) stores data about each subdirectory and/or file on your hard disk (see *Figure 2*). The data base includes the source of the original file or subdirectory, the last backup date and time, and any overrides of the configuration defaults it requires.

## Ease of Use

Using File Backup is easy. You load the BU.DATA data base onto the AppleWorks desktop, choose File Backup from the TimeOut Menu, select "File Backup" from the menu, and swap disks as required. File Backup will sound a bell and/or automatically eject your backup disk when it finishes working with the disk. (You use TimeOut Utilities to set the bell/eject options.)

My daily backup takes about five minutes.

Configuring and specifying the initial file placements is the most important and most difficult part of using File Backup. I suggest that you go through

## Software Review...

the file allocation procedure and configure the default parameters after you get a better understanding of the function of the configuration parameters and after you create the BU.DATA data base.

UltraMacros owners can use a macro provided with DiskTools that helps you allocate files and subdirectories to backup volumes. Using the macro is easy; it asks for the volume it should scan and compiles a list of all the subdirectories on that volume. You rearrange the records by putting the subdirectories you expect to modify most frequently first, followed by those you will modify less often. A second pass with the macro inserts suggested backup volume names in each record and displays a summary report on the screen. You can re-run the macro as often as desired until the allocation seems appropriate.

Unfortunately, I encountered two problems with the macro. First, the macro only lets you create a BU.DATA file for one hard disk volume. You can work around this limitation by creating two or more BU.DATA files and using the AppleWorks clipboard to combine the files before you begin the second pass.

Second, the macro occasionally warns you that a pathname exceeds the ProDOS length limit. (You get the warning because the macro concatenates the backup volume name and the subdirectory pathname.) This is more bothersome because you do not find out that you violated the pathname length limit until you make your first backups.

If you use long volume and/or subdirectory names, you will have to rename your volumes and/or subdirectories and repeat the setup process. You will also have to revise all your macros that refer to volumes and pathnames on your system.

After you determine the allocation of the files on the backup disks, you leave BU.DATA on the desktop and select File Backup from the TimeOut Menu. Prepare to sit for a few hours because creating your first set of file-by-file backups takes time. (My first pass took about six hours, including the time necessary to correct the long pathnames.) However, once you make your first backups, daily

### Hints for Using File Backup

Here are four suggestions to consider when you use DiskTools' File Backup:

1. File Backup stores a second copy of the file on the disk before deleting the original. As a result, you must leave enough space on each backup volume to accommodate a second copy of the largest file you will store on that volume.
2. You can avoid excessive disk swapping by storing all subdirectories that have similar patterns of use on the same backup disk. For example, back up all your personal correspondence on the same disk.
3. Put AppleWorks' SEG.ER file on your first backup volume. SEG.ER changes every time you boot AppleWorks and will be updated in every daily backup.
4. Remember to save BU.DATA after each of your daily backups.

updates take only minutes and can save you hours of work and frustration when you damage or lose a file.

In summary, the combination of Volume Backup and File Backup provides a convenient way for AppleWorks users to maintain a comprehensive set of backups for a hard disk. The system is well documented, easy to use, and includes few rough edges. Now that I have these utilities, I keep regular backups of my work and find it easier to recover files that I inadvertently delete, change, or damage with my system.

### Archive

DiskTools' Archive compresses files for uploading and decompresses files you download without leaving the AppleWorks environment. Archive can add files to an existing archive or extract individual files from an archive.

Configuring Archive is easy; all you do is specify a default source and destination, compression type, and archive format. (TeleComm users should set the format to .BXY to avoid the bug that exists in TeleComm's Auto Binary ][ option.)

ShrinkIT users will immediately feel comfortable with Archive. You simply select the source and destination, supply an archive name, and watch the thermometer. However, experienced ShrinkIT users will notice the absence of utilities that let you copy files, create subdirectories, and format and catalog disks: These applications already exist within the TimeOut family and need not be duplicated here.

The on-disk documentation for Archive is readable and informative.

Unfortunately, I encountered an occasional problem while testing Archive. When you compress a file using compression method LZW/1 and decompress the file with ShrinkIT, ShrinkIT will display a "Data CRC Error" message. It is sometimes a real problem and is sometimes a false error; if the file will be decompressed by someone else, always use method LZW/2.

### Summary

In summary, the DiskTools package is a welcome addition to my library of AppleWorks add-ons. It provides essential volume and file backup capabilities, convenient archiving functions for telecommunications and permanent storage, and includes two valuable "freebies" (TO.About Time and TO.Calendar).

Anyone who has had the misfortune of losing data on a hard disk will immediately recognize the value of this package for the backup utilities alone.

*[John Nunnikhoven is the innkeeper at The Colonial House, a delightful Vermont country inn. You can reach Mr. Nunnikhoven at Route 100, Box 138, Weston, Vermont 05161; (802) 824-6286.]*

*DiskTools lists for \$49.95 from Office Productivity Software. Until August 1, 1992, NAUG members can buy DiskTools directly from the publisher for \$35 plus \$2.50 s/h. See the "AppleWorks News" on page 4 for the details of this offer.*

*Office Productivity Software, Box 1042, Mahomet, Illinois 61853.]*

# A Quick Way to Change Directories

by Robert Rowe

It is easy to store a file in the root directory of a disk. But storing files in subdirectories can be more troublesome. After reading about a number of uses for the Open-Apple-Return Key combination in AppleWorks 3.0, I stumbled across a way to use the keys to make it easier to change those directories.

Follow these steps to store a file in a different directory:

1. Use any technique you like to get the catalog of files in the destination subdirectory on the AppleWorks screen. (These techniques include using AppleWorks 3.0's "point and shoot" feature that lets you follow the subdirectory structure on the disk.)
2. Enter an Open-Apple-Return. That will log you into the current directory, but will not load any files onto the desktop.
3. Issue an Apple-Q, select the file you want to save, and enter an Apple-S. AppleWorks will save the file into the new directory.

*[Robert Rowe teaches electronics to naval personnel at the San Diego 32nd Street Naval Station.]*

### NAUG News

NAUG is updating its popular Members Helping Member directory that lists volunteers who help solve AppleWorks and Apple II problems. You can volunteer for this service by completing the Members Helping Members insert in this issue of the **AppleWorks Forum**. All current Members Helping Members volunteers should complete this form so their names continue to appear in our listings.

One of NAUG's strengths is its members' willingness to share their talents and ideas. Please volunteer to help your colleagues in the AppleWorks community.



# New Disks in the NAUG Public Domain Library

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## **Barrow Utilities – Disk 3**

Roy Barrows recently developed his third disk of useful UltraMacros-based utilities for the NAUG Public Domain Library. Barrows Utilities – Disk 3 includes the following macro-based utilities:

**ADB.Clip:** A data base clipboard that stores as many “clips” as can fit in desktop memory and lets you view the clipboard contents. You can save the contents of the clipboard in a file for later use.

**AWP.Clip:** An enhanced clipboard for the AppleWorks word processor. Similar to ADB.Clip in features and operation.

**Cal.Maker:** Creates a monthly appointment calendar that you can print or save to disk.

**SpaceCheck:** Checks and fixes two common spacing problems in word processor documents.

**Gloss.Macro:** Lets you create and use your own glossaries with AppleWorks. (A glossary contains sets of paragraphs and other boilerplate text that you can enter into a document by selecting your choice from a menu.) This is a scaled-down version of TimeOut Glossary from the TimeOut DeskTools disk.

**Utils.ASP:** A collection of six useful tools for the AppleWorks spreadsheet module. These menu-driven macros will replace any formula with its calculated value, recalculate any set of cells you specify, change column widths with a single keystroke, draw vertical and horizontal lines, and put consecutive numbers in any series of cells you specify.

The Barrows Utilities – Disk 3 includes both TimeOut and Task File versions of each utility, word processor files with annotated copies of the macros, and documentation in an AppleWorks word processor file on the disk. The disk requires AppleWorks 3.0 enhanced with UltraMacros 3.1.

Our thanks to Roy Barrows for his continuing con-

tributions to the NAUG Public Domain Library and to the AppleWorks community.

## **DISK.KILL**

When ProDOS 8 boots, it creates a list of all disk drives that it “thinks” are attached to the computer. Although ProDOS can tell if a slot contains a disk controller, it cannot tell how many drives are attached to the controller. For example, if you have a single 5.25-inch drive in slot 6, ProDOS will include slot 6, drive 1 and slot 6, drive 2 in its list, even though there is no second drive. ProDOS wastes several seconds each time it tries to access this nonexistent drive.

DISK.KILL removes nonexistent devices from the ProDOS 8 device list and eliminates this delay. DISK.KILL is compatible with all versions of ProDOS 8 and with GS/OS 5.0.4 and 6.0; the program does not affect the operation of 16-bit programs running under GS/OS. The author assumes that you know how to launch BASIC and run BASIC programs on your computer.

Christopher Madsen, the author of DISK.KILL, requests a \$5 donation if you use the program. If you like DISK.KILL, send the shareware payment directly to the author, not to NAUG.

## **Formulate Demo Disk**

“Formulate” is Seven Hills Software’s new formula editor for AppleWorks GS, GraphicWriter III, BeagleWrite, and other 16-bit Apple IIGS applications. You use Formulate to create and edit formulas you then incorporate into your documents. A complete description of Formulate appears on page 25 of last month’s issue of the *AppleWorks Forum*.

This disk contains a demonstration version of Formulate that lets you do everything except export your formula. It also prints “Demonstration Version” on your output. The program requires an Apple IIGS running GS/OS 5.0.4 or later.

## Public Domain Update...

Formulate lists for \$49.95 but is available at significant discounts from mail order dealers.

NAUG distributes the Formulate Demo Disk on a 3.5-inch disk that costs \$6 plus \$2 s/h *per order*.

### GS.PowerTools

NAUG is now shipping an updated version of GS.PowerTools, an exceptional collection of CDAs, NDAs, inits, and utilities for the Apple IIGS. A description of the programs on this disk appears in the September 1991 issue of the *AppleWorks Forum*.

The updated GS.PowerTools disk includes an enhanced version of SuperDataPath, which modifies the Open Command in 16-bit programs (such as AppleWorks GS) so the programs remember the subdirectories you use to store your data.

The disk also includes the latest version of Karl Bunker's Quit-To, a CDA that lets you launch any program from within any ProDOS 8 or GS/OS application without returning to the Finder.

Many programs on the disk are shareware, although the authors do not require additional shareware payments from registered users.

Our thanks to Karl Bunker for updating the disk for the NAUG Library. We recommend these utilities to all NAUG members who use Apple IIGS computers running under System 5.0.4 or System 6.

GS.PowerTools comes on one 3.5-inch disk and costs \$6 plus \$2 s/h *per order*.

### Pointless Fonts Index Disk

NAUG's Public Domain Library offers twenty disks filled with fonts you can use with Pointless. (See page 26 of the April 1992 issue of the *AppleWorks Forum* for more information about those disks.)

The NAUG Public Domain Library now includes the Pointless Fonts Index Disk, an AppleWorks data base file that lists the font and disk name of all 258 fonts. This data base makes it easy for Pointless users to locate the font they want for a specific application.

Our thanks to Joe Connelly for developing this disk for NAUG.

### How to Get Disks

Unless otherwise noted, all disks are available in both 5.25-inch (\$4) and 3.5-inch (\$6) format, plus \$2 *per order* for shipping and handling. Order from: Public Domain Library, NAUG, Box 87453, Canton, Michigan 48187; (313) 454-1115; Fax: (313) 454-1965. NAUG accepts Visa and MasterCard. All NAUG disks (except system disks provided by Apple Computer) are also available for downloading from NAUG's electronic bulletin board (the Electronic Forum), and from the NAUG areas on CompuServe, America Online, and GENIE.

### AppleWorks News

#### AppleWorks News for Educators

The Minnesota Educational Computer Corporation (MECC), the nation's largest developer of educational software, announced that its 1992-93 conference will be held on November 21-24 at the Hyatt Recency Hotel in downtown Minneapolis. Contact MECC for a copy of the program and for more information about the conference. [MECC, 6160 Summit Drive North, Minneapolis, Minnesota 55430; (612) 569-1500.]

Computer-using educators who emphasize writing and learning about other cultures should contact the ScrapBookUSA Writing Project. This project gives students a real audience for their written communications. Participants use AppleWorks or any other Apple II, Macintosh, or MS-DOS word processing program capable of creating ASCII (Text) files to create documents that describe a person, place, tradition, or souvenir of home. They share their writing electronically with the other schools that participate in the project. Contact Emery Roth, the organizer of the ScrapBookUSA Writing Project, for more information. [Emery Roth II, 328 Romford Road, Washington, Connecticut 06794; America Online: AFC Tooter; CompuServe 73227,3235.]

# News and Special Offers

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## **A.L.I. Computer Corporation**

**NAUG** members looking to replace or enhance their Apple II systems should consider A.L.I. Computer Corporation. A.L.I. sells used 64K Apple IIe monochrome, single drive systems for \$375, Apple IIc monochrome systems for \$350, and Apple IIgs RGB systems equipped 1-megabyte of RAM and a single 3.5-inch disk drive for \$950. (Deduct \$25 from the Apple IIe and IIc prices and \$55 from the Apple IIgs price if you enclose a check or money order with your order.) The company also sells used Apple II peripherals at attractive prices; contact the company for a price list.

A.L.I. includes a free copy of Cyberlearn, a powerful Apple II authoring system, with each purchase and will include a free Apple-compatible dot matrix printer with each order for five or more computers.

A.L.I., which sometimes ships non-Apple brand monochrome monitors and/or disk drives, offers a 90-day warranty for all equipment. All sales are final; you can only return defective equipment for repair. The company accepts checks, money orders, and school purchase orders, but not credit cards.

*[A.L.I. Computer Corporation; 1592 Union Street, San Francisco, California 94123; (800) 800-2786; Fax: (415) 474-0900.]*

## **National Council of Teachers of Mathematics**

The National Council of Teachers of Mathematics recently published a laudatory review of **NAUG's** Algebra Worksheet Templates for AppleWorks. The reviewer concludes "...the graphics, editing features, and range of topics make the Algebra disks an invaluable addition to a teacher's repertoire of tools." Congratulations to **NAUG** member Mitchell Bernstein, who conceived this project and developed these excellent disks.

A description of the Algebra Disks appears on page 32 of the September 1991 issue of the *AppleWorks Forum*.

## **Power Industries**

Power Industries recently announced special **NAUG** member discounts on Delta Drawing Today, the company's newly re-written drawing program. Delta Drawing Today lets you use easily remembered keystrokes to draw doodles, geometric shapes, pictures and animations, and manipulate text on the screen. Designed for use by children, Delta Drawing Today captures your keystrokes and automatically creates LOGO-like programs that describe the creative process behind each drawing. Users can enhance this program to produce more elaborate drawings while gaining a basic understanding of programming.

Delta Drawing Today produces Hi Res and Double Hi Res graphics you can print in color or black and white on an ImageWriter or other popular dot matrix printer. You can also export your graphics to Publish It!, TimeOut SuperFonts, and most 8-bit draw and paint programs. The program comes with an 18-page User's Guide, a 72-page Teacher's Guide, ten laminated project cards, and other teaching tools. Delta Drawing Today runs on any Apple II+, IIe, IIc, IIc Plus, or IIgs computer equipped with at least 64K of RAM (128K recommended) and one disk drive.

Delta Drawing Today normally retails for \$69.95, which includes unlimited support on the company's toll-free number. Until October 1, **NAUG** members can buy the program directly from the developer for \$39.95 plus \$4 s/h. Power Industries accepts Visa and MasterCard and offers **NAUG** members a 30-day money back customer satisfaction guarantee on this product. Identify yourself as a **NAUG** member when you place your order.

*[Power Industries, Inc., 37 Walnut Street, Wellesley Hills, Massachusetts 02181; (800) 395-5009; Fax: (617) 235-0084.]*

# Help with Beagle Bros Enhancements

by Nanette Luoma

## How to Use this List

To the left of each volunteer's name are numbers indicating the utilities the consultant supports. Volunteers are listed alphabetically by state.

1 = DeskTools	9 = ReportWriter
2 = DeskTools II	10 = SideSpread
3 = FileMaster	11 = SpreadTools
4 = Graph	12 = SuperFonts
5 = gs Font Editor	13 = TeleComm
6 = Point to Point	14 = Thesaurus
7 = PowerPack	15 = UltraMacros
8 = QuickSpell	

### Arizona

		City	Home	Work
1-4,7-15	Clay Evitts	Tucson	602-885-9789	602-296-5491
4,8,10,12	Bill Holmes	Chandler	602-899-4841	602-786-7170

### California

1,12,14	Ken Armstrong	Porterville	209-781-3296	805-323-0866
1,6,8,15	Dan Balsley	San Ramon	415-829-5085	
8,12,14,15	Brian Blue	Danville	415-838-0997	415-954-6002
1-4,7-15	James Davis	Hayward	415-489-7024	
3,12,15	Don Farrar	Pleasant Hill	415-932-5509	
8	Jim Gentilucci	Los Osos	805-528-5049	
1-15	Terry Higgins	Newark	415-745-7884	415-593-2500
1-3,10	Lucien LaCour	Woodland Hills	818-348-7787	
1-4,8,10-12,14,15	Berenice Maltby	Corona del Mar		714-640-7369
1-3,5,7,8,10-12,14,15	Will Nelken	San Rafael	415-459-0845	415-456-1795
1-3	Jesus Oroasco	Milpitas	408-270-1011	408-945-4344

### Colorado

8,11,15	Lyle Graff	Littleton	303-794-5970	303-977-4557
4,8,10,14	Geoff Hollingsworth	Morrison	303-697-9277	303-760-4345
8	John Lefebvre	Thornton	303-451-5558	303-457-2852
8,12,14,15	John Loren	Littleton	303-978-0603	
1-5,7-10,12,14,15	Stephen Reiss	Aspen	303-923-6172	303-923-6172

### Connecticut

3,7,8,10-12,14	Vincent Castelli	Trumbull	203-261-2475	203-452-5384
4,10,12	Judson L. Day	Groton	203-445-6600	303-445-6600
3,4,7,8,10-12,14,15	William Delaney	Enfield	203-745-4048	203-749-8391
12	Martin Knight	Middletown	203-346-9698	203-347-8594
3,4,8,10-12,14	Emery Roth II	Washington	203-868-7118	203-868-7326
1-4,6,7,10,15	Newton Shaffer	Gales Ferry	203-464-9716	

### Delaware

15	W. Henry Linton, Jr.	Wilmington	302-478-3740	
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### Florida

1-5,7-15	H. Clay Bailey III	Jacksonville	904-744-2499	904-725-3477
1-4,7,8,10-12,14,15	Bruce Pfeffer	Tallahassee	904-386-2685	
1-15	Jeff Strichard	Ft. Lauderdale	305-587-9590	
1-4,7,8,10-12,14,15	Mike Ungerman	Oviedo	407-366-0060	407-366-0156

City Home Work

### Illinois

12,15	Mark Baniak	Park Ridge	708-825-6301	708-292-4116
1-5,7,8,10,12,14,15	George Duffey	Bloomington	708-894-0849	708-451-3106
1-4,7,10-12,15	Douglas Gum	Mahomet	217-586-2904	
1-3,8,12,14	Susan Husar	Chicago	312-631-5884	
15	Dr. Larry Thaeete	Waukegan	708-662-2328	708-578-3435

### Indiana

1-3,7,8,10,12	Jack Countryman	Greensburg	812-663-4998	
1-4,7-10,12,14,15	Kevin Gold	Indianapolis	317-290-8948	317-543-7098
8	Laura J. Kelley	Gwynneville	317-763-7290	

### Iowa

3,4,8,10,12,15	Keith King	Ft. Madison	319-372-9521	
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### Kentucky

3,4,11,12	Donald L. Corson	Louisville	812-256-3517	502-473-3083
1,3,12-15	Dan Crutcher	Louisville	502-895-1476	502-895-2720

### Louisiana

1,3,6-8,10,12-15	Charles Fryling, Jr	Baton Rouge	504-766-3120	504-388-1473
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### Maryland

2-4,10,12,14,15	Raymond Greenberg	Darnestown	301-330-4912	301-353-4959
1-3,7-10,12-15	Ben Maser	Owings Mills	301-252-7884	301-887-0717
1-4,7-12,14,15	Anthony R. Mattern	North East	410-658-4799	410-658-5535
1-12,14,15	Leon H. Raesly	College Park		301-220-3113
1-15	Ray L. Settle	Arnold	301-647-9192	301-887-0106
1-4,7,9,10,12-15	Woodrow S. Webster	Fallston	301-879-7034	301-887-0171

### Massachusetts

1-3,8,14	Donald McCabe	Westport	401-294-6256	508-636-2611
6,8,14	Chuck Scheffreen	Marblehead	617-631-2787	617-728-7553
15	Ed Stutsman	Shutesbury	413-259-1217	

### Michigan

4,6,8,10,14	Jim Anker	Auburn Hills	313-391-0033	313-544-5344
1,3,4,7-11,15	Michael McMinn	Swartz Creek	313-655-4442	313-232-6541
1,8,10,12,14,15	Pete Ross	Wayne	313-728-8269	
8,14	Deborah Williams	Grosse Ile	313-671-0267	313-675-1550

### Minnesota

1-5,7,8-10-15	James Hirsch	Coon Rapids	612-421-8393	612-422-5572
1,8,12,15	David Ernest Johnson	Minneapolis	612-824-2728	612-824-2728
3,4,15	Dick Kenfield	Hopkins	612-938-4382	
8,10,12,14,15	Sandra Redding	Marshall	507-532-2959	
12-14	Peter Zambino	St. Paul	612-690-0536	612-489-1459

### Missouri

1-5,7-12,15	Bob Suits	Columbia	314-445-6082	
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### Nebraska

1-15	Jim Corbin	Bellevue	402-291-7285	402-331-7312
1-12,14,15	Dr. John W. Kelley	Omaha	402-397-3485	
1-3,7,8,10-12,14,15	Larry B. McEwen	Hastings	402-463-2267	402-461-7550

### Nevada

1-8,10-15	Keith Johnson	Sparks	702-626-2543	702-784-4812
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### New Hampshire

1-3,7-12,14,15	Phil Kirkpatrick	Keene		603-352-0640
7,15	Frank R Savory	Derry		603-434-5407
8,12,14	Bob Skinner	Plymouth	603-536-3626	



		City	Home	Work
<b>New Jersey</b>				
3,10,12	Mitch Bernstein	Medford	609-654-1356	
1-4,6-15	Pete Crosta	Nutley	201-667-6369	201-677-4050
12,14-15	Gary Hansen	Highland Park	908-819-0017	
1,8,10,12,14,15	Link Keur	Augusta	201-875-2568	201-992-7000
1-3,6-8,10,13,14	David J. Scott, MD	Wall	908-531-4016	908-681-0600

<b>New Mexico</b>				
1-4,7-12,14,15	Willis George, Jr.	Albuquerque	505-897-4886	505-883-9743
1-3,6-8,10,11,14,15	Gary Young	Corrales	505-897-1770	505-897-1770

<b>New York</b>				
1,2,4,7,8,10-12,14,15	Bob Beer	Coram	516-928-6870	
1,2,4,8,10,12-14	Linda Doscher	West Nyack	914-358-7064	
3,4,7,8,10,14	David W. Gagnon	Gowanda	716-532-4870	
10,12,14	Ira M. Garvin	Oakdale	516-563-1253	516-489-7620
3,4,7-12,15	Carlos M. Madan	Morrisonville	518-562-0779	518-359-3322
1-15	Larry Merow	Sayville	516-567-0603	516-422-0315
1-5,7-12,14,15	James L. Nicoll	Pittsford	716-381-9480	716-546-6732
8	Frances H. Snedeker	Larchmont	914-834-3081	
3,4,8,10,12,14	Jerry Taylor	Rochester	716-964-3319	
1,3,4,6,8,10,12,15	Terry Williamson	Orchard Park	716-662-5104	716-873-9750

<b>North Carolina</b>				
3-5,7-10,12	Marc Apfelstadt	Greensboro	919-282-1494	919-334-5970
1-4,7,8,10-12,14,15	Terry W. Robertson	Charlotte	704-536-4261	704-377-0111

<b>Ohio</b>				
1,3,7,8,10-12,14,15	Dr. Jason Chao	Cleveland Hts.	216-321-5451	216-844-3791
3,7,8,12,14	Don E. Fisher	Dayton	513-890-0428	513-461-2444
4,8,14,15	Jason Fogt	Lakeview	513-843-5779	
1-3,7,8,10,11,15	Carman Greco	St. Clairsville	614-695-5026	

<b>Oregon</b>				
1-4,7-15	Jim Emig	Portland	503-771-1916	503-280-5714
1-5,7-12,14,15	Norma M. Gradwohl	Brownsville	503-466-5668	503-466-5668
1,4,8	Dave Lomax	Lake Oswego	503-636-7289	
14	Richard Millus	Medford	503-772-9787	

<b>Pennsylvania</b>				
1-3,7-12,14,15	Claude W. Davis, Jr.	Stewartstown	717-993-6874	717-845-3571
1-3,5-15	Martin Friedman	Broomall	215-353-2753	
15	William D. Hall	Philadelphia	215-824-1160	215-441-0800
15	Charles R. Schultes Jr.	Lehighton	215-377-5169	215-377-6180
1-15	Bruce Shanker	Warminster	215-674-0118	
3,7,8,12,14,15	Hal Shapiro	Eagleview	215-630-8936	215-922-0500

<b>Rhode Island</b>				
12	Robert J Ricard	Cranston	401-781-5202	

<b>Tennessee</b>				
8,12,14	Jerry Bruce	Bristol	615-652-7473	703-676-2999
1-3,7	Bob Evridge	Knoxville	615-693-8817	615-693-9242
6	Joel Goldman	Nashville	615-352-3617	

<b>Texas</b>				
6	Larry Jones	El Paso	915-533-3302	915-565-3016
1-3,7,8,14,15	Joseph Kline	Lubbock	806-796-0829	
1-5,7,8,10-12,14,15	Ramon Merlin	San Antonio	512-496-5331	
1,4,8,10,11,15	Bud Simrin	Ft. Worth	817-246-0859	
1-3,8,10,12,14	Rev. Jerry D. Venable	Liberty	409-336-3178	409-336-6958

<b>Vermont</b>				
3,7,8,14,15	Douglas C. Corey	Middlebury	802-388-6209	802-388-4021
4,8,10,12,15	Linda Metzke	Concord	802-748-3298	802-626-9371

<b>Virginia</b>				
7,8,10,12,14,15	Peter Pfeiffer	Herndon	703-437-1985	703-834-3618
3,10,12,15	Wayne Sheffield	Virginia Beach	804-340-6799	

<b>Wisconsin</b>				
7,8,15	Debby Henning	Sharon	414-736-9229	
1-3,7,11-13,15	Peter W. Lee	Milwaukee	414-344-6807	414-229-6660
15	Todd Novakofski	Ladysmith	715-532-7430	715-532-6202
1-4,7,9,10,12-15	Scott Peterson	Madison	608-246-0762	

<b>Australia</b>				
1-4,7-15	D.E. Bruce	Caringbah	2-527-4731	2-524-3859
5,10,12	Ralph Morgan	Tweed Heads	075-246811	

<b>Canada</b>				
4,8,15	Michael Beebe	Victoria	604-477-4630	604-721-7954
1-5,7,8,10,12-15	John Carson	Montreal	514-965-0886	
7	Patrick M. Duffy	Lethbridge	403-329-4211	
1-3,5,7,8,12-14	Brian J. Elston	Bowmanville	416-436-2510	416-484-2600
1-3,7-8,10-12,14,15	Jean Guy Mariage	Montreal	514-922-4566	514-252-2541
1-3,7,8,12,14,15	Terry Price	Schomberg	416-939-8104	
5,8,10,12	Robert Sutherland	Toronto	416-465-2945	
1,2,7,8,12,15	Nick Van Helsdingen	Tranquility Base	604-296-3260	

<b>England</b>				
12,14,15	Terry Cymbalisty	Leeds	0532-525038	
4,7,15	Andrew C. Letchford	Plymouth	0752 766435	0752 66435
6	John Richey	Surrey	252-723993	71-409-0092

<b>France</b>				
5,8,9,12,15	Henry H. Marsh	Fontenay Aux Roses	43.50.27.45	
1-4,10-12,14,15	Alain Zimmerman	Palaiseau	1.69.31.07.64	

<b>Ireland</b>				
1,2,4,7,14,15	Colm Higgins	Dublin	01-2882820	01-574144

<b>Israel</b>				
12,14,15	Bernard Katz	Ramat Aviv	(03) 642-3716	

<b>New Zealand</b>				
7,8,12,15	H.P.H. Harrison	St. Lukes	064-9-869-419	

<b>Saudi Arabia</b>				
3,6,8,15	Ken Burnell	Dhahran	3-878-9173	3-875-0051
6	James E. Hanushek	Dhahran	3-878-4075	3-877-1533

<b>Switzerland</b>				
1-5,8-10,12,14,15	Charles Kubler	Volketswig	01-945-5873	

<b>Venezuela</b>				
1-4,7-12,14-15	Omar Quintero	Caracas	02-241-1366	02-291-2526

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## Electronic Index Update

Electronic Index Disk June 1992 Update; Enter the default values for these categories:  
Volume #: 7 • Issue #: 6 • Date: June 92

Letters to NAUG • 2 • Controlling Where You Save • Harmon, Linda • Apple IIe; FileMaster; Copy II+

Letters to NAUG • 2 • No Slot Clock Problems • Kelly, Barbara Singer • No Slot Clock; Ultra-Macros; SuperPatch; Companion Plus; clock cards

Letters to NAUG • 3 • Problems with "Creeping" Labels • Drebes, Karen Ann • labels; printing; data base

Letters to NAUG • 3 • Member Needs a Disk Notcher • Schell, Dorothy Viets • 5.25-inch disks

Letters to NAUG • 3 • Word Count Reminder • Pegues, William • spell checker; word count

Letters to NAUG • 4 • Use Macros to Customize AppleWorks • Kline, Dave • macros; Ultra-Macros; Mark Munz

Special Offers • 4 • Special NAUG Offers • N/A • JEM Software; DB Pix; Office Productivity Software; Resource Central; DiskTools; Bag of Tricks

General Interest • 5 • How to Recover Lost Data - Part 2 • Hirsch, James • disk recovery; Bag of Tricks; damaged files; Change-A-File/Resurrection; Deliverance; ProSel

Special Offers • 9 • Special Member Offers • N/A • 1040Works; AlphaCheck; Reports Plus; Payroll Plus; finance

My Favorite Template • 10 • A Genealogy Research Template • Hecker, Stan • templates; spreadsheet; genealogy

Advanced Techniques • 13 • A Clipboard Window Macro • Clemesha, Barclay • macros; Ultra-Macros; clipboard; word processor

AppleWorks News • 16 • A2 Central Summer Conference • Resource Central; A2 Central; seminars

My Favorite Macro • 17 • A Macro that Deletes Duplicate Records • Johnson, Keith • macros; UltraMacros; data base; duplicate records

Software Review • 23 • TimeOut DiskTools: Valuable Disk Utilities • Nunnikhoven, John A. • DiskTools; TimeOut; backups; Shrink-It; calendars

Quick Tip • 26 • A Quick Way to Change Directories • Rowe, Robert • directories; pathnames

NAUG News • 26 • New Members Helping Members Directory • N/A • Members Helping Members

Public Domain Update • 27 • New Disks in the NAUG Public Domain Library • N/A • Barrows Utilities; DISK.KILL; Formulate Demo Disk; GS.PowerTools; Pointless Fonts Index Disk; calendars; spreadsheet; clipboard

AppleWorks News • 28 • AppleWorks News for Educators • N/A • MECC; ScrapBookUSA

AppleWorks News • 29 • News and Special Offers • N/A • A.L.I. Computer Corporation; National Council of Teachers of Mathematics; Power Industries; Delta Drawing Today; hardware; education; Algebra Disks

Members Helping Members • 30 • Help with Beagle Bros Enhancements • Luoma, Nanette • DeskTools; FileMaster; Graph; GS Font Editor; Point to Point; PowerPack; QuickSpell; ReportWriter; SideSpread; SpreadTools; SuperFonts; TeleComm; Thesaurus; UltraMacros

**New Key Words** DB Pix; 5.25-inch disks; DiskTools; duplicate records; directories; Barrows Utilities; DISK.KILL; Formulate Demo Disk; Pointless Fonts Index Disk; A.L.I. Computer Corporation; National Council of Teachers of Mathematics; Power Industries; Delta Drawing Today; Reports Plus; Payroll Plus; calendars; ScrapBookUSA

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